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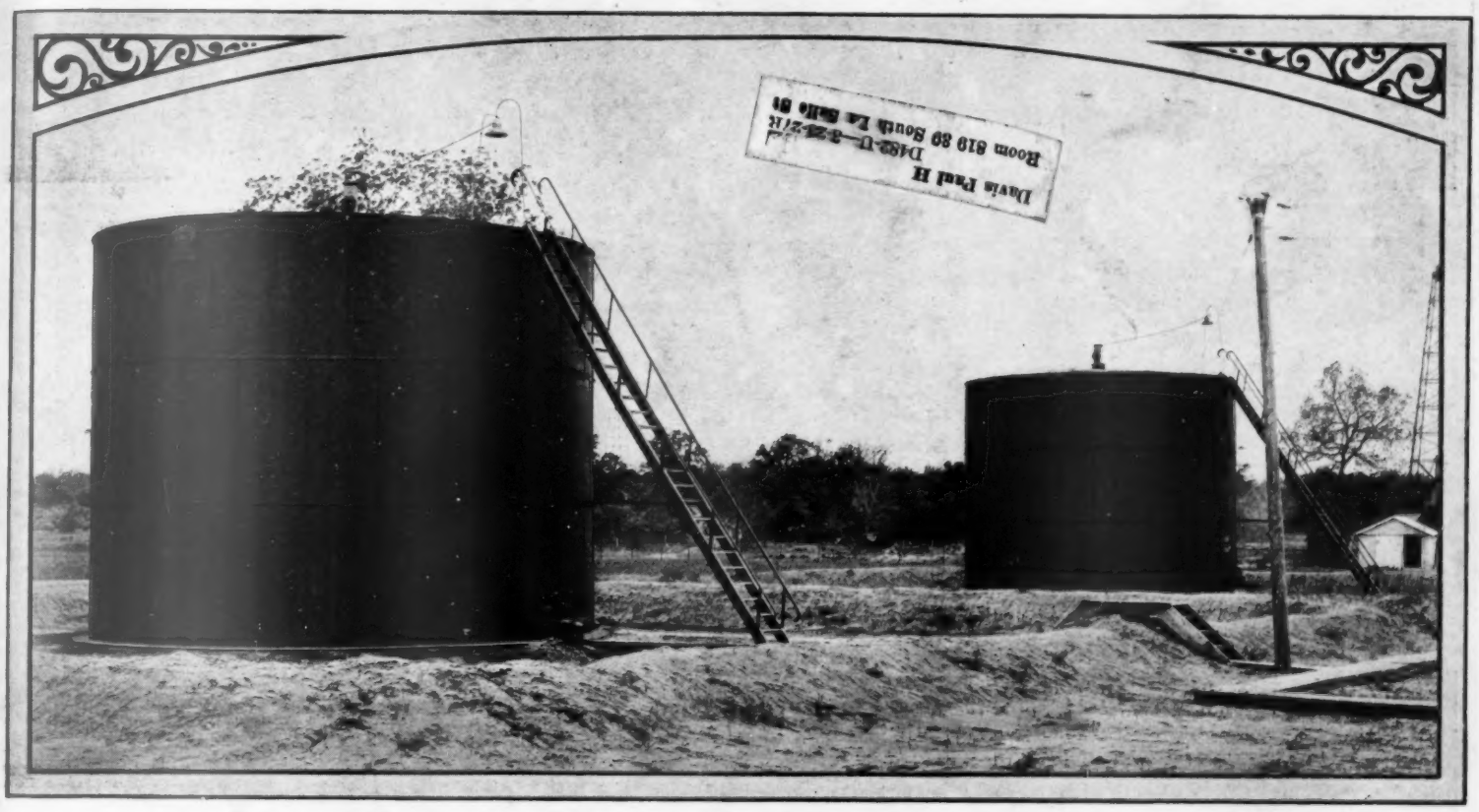
# The OIL and GAS JOURNAL

PRODUCING REFINING MARKETING

Published Every Thursday TULSA, OKLAHOMA, JUNE 17, 1926 $6.00 a Year





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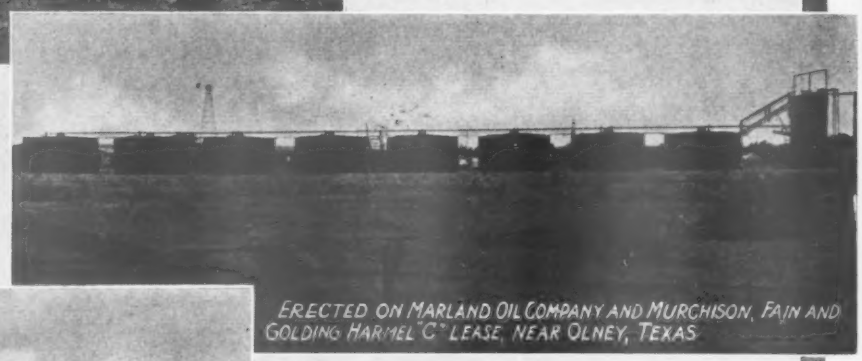

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PRODUCING REFINING MARKETING

VOL. 25. NO. 4. TULSA, OKLAHOMA, JUNE 17, 1926

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# Crude Oil Situation Continues Good

**Highest daily average estimated production week ended May 30, 1925, 2,347,984 bbls. Lowest in 1925, January 3, 1,911,730 bbls.**

## Texas Panhandle Chiefly Responsible for Gain Last Week. Refined Market Weakness a Deterrent Factor

By Andrew M. Rowley

**Highest daily average estimated light oil production in 1925, week ended January 17, 1,525,220 bbls. Lowest in 1925, July 18, 1,374,173 bbls.**

The Panhandle Field in Texas was the big factor last week in the increase recorded in crude oil production in the United States, that section showing a gain of 8,169 barrels daily in the average output for the week. Gains in Oklahoma, due chiefly to the Garber Field, and in California and the Rocky Mountain area, slightly more than offset losses in the Gulf Coast, East Central Texas and Louisiana and Arkansas.

All of which emphasizes the fact the petroleum industry is in a strong position at this time as production in the older fields of the country is not showing any material gain despite the record amount of drilling while the increase coming from the Texas Panhandle is not having the same effect upon general conditions as if the crude were being produced in a section more readily accessible to markets. A great part of the Panhandle crude is being shipped to Texas Gulf Coast refineries and ports with the result companies in other sections of the country, with crude oil requirements to fill, are confronted with the problem of finding sufficient production during the remainder of this year, with no new fields in sight to offset natural declines which may be expected.

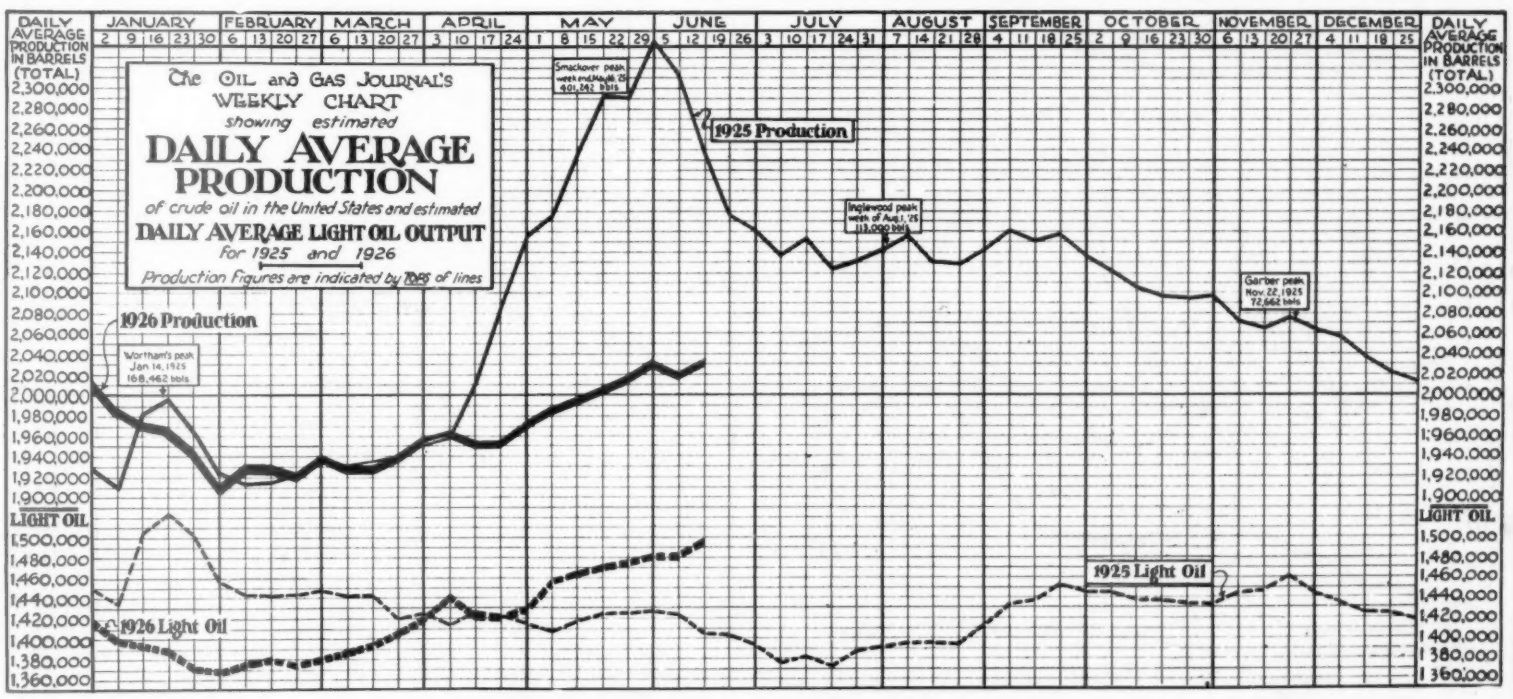
Production is far below what it averaged at this time last year while consumption has shown a good increase and may be expected to record the same rate of gain during the remainder of the year. Heavy withdrawals from crude storage are still being made in the Mid-Continent area and conditions in that section of the country, which really is the barometer of the industry as a whole, are exceptionally good. There is one speck on the horizon, however, which deserves careful consideration by those inclined to be overly optimistic. That is the downward trend which has developed in the refined oil market. Too much gasoline is being made and gasoline stocks are too high to insure an entirely healthy condition. Fuel oil and kerosene, the other principal refined products are also showing a downward price tendency in the Mid-Continent area. If the refined market continues to show a weakening tendency during the summer, it is bound to be reflected on the crude oil market.

### PRODUCTION IN THE UNITED STATES

Estimated daily average production of light and heavy gravity crude oil in the United States for week ended June 12, and a comparison with the previous week follows:

| | June 12 | | June 5 | |
|---|---|---|---|---|
| | Light | Heavy | Light | Heavy |
| Oklahoma— | | | | |
| Tonkawa | 34,715 | ..... | 35,160 | ..... |
| Burbank | 45,635 | ..... | 44,795 | ..... |
| Other Osage Fields | 34,230 | ..... | 33,935 | ..... |
| Cushing and Shamrock | 21,710 | ..... | 21,805 | ..... |
| Bristow and Eastern Bristow | 29,635 | ..... | 29,720 | ..... |
| Cromwell | 17,140 | ..... | 17,440 | ..... |
| Garber | 39,555 | ..... | 35,840 | ..... |
| Blackwell-Braman | 18,170 | ..... | 18,690 | ..... |
| Davenport | 10,285 | ..... | 10,660 | ..... |
| Wewoka | 28,195 | ..... | 28,140 | ..... |
| Northern Miscellaneous | 112,285 | ..... | 113,475 | ..... |
| Southern Fields | 66,735 | ..... | 66,275 | ..... |
| Total Oklahoma | 458,290 | ..... | 455,935 | ..... |
| North Louisiana | 44,280 | 16,420 | 45,140 | 16,295 |
| Arkansas— | | | | |
| Smackover Light | 16,800 | ..... | 17,105 | ..... |
| Smackover Heavy | ..... | 131,495 | ..... | 132,440 |
| Miscellaneous | 23,935 | ..... | 25,605 | ..... |
| Total Arkansas | 40,735 | 131,495 | 42,710 | 132,440 |
| North Central Texas | 173,873 | ..... | 173,408 | ..... |
| Texas Panhandle | 46,353 | ..... | 38,184 | ..... |
| Powell | 29,200 | ..... | 29,780 | ..... |
| Mexia, Currie, Richland, etc. | 15,330 | ..... | 16,000 | ..... |
| Wortham | 8,250 | ..... | 9,940 | ..... |
| Kansas | 107,410 | ..... | 107,490 | ..... |
| Total Mid-Continent Area | 923,721 | 147,915 | 918,587 | 148,735 |
| Gulf Coast | ..... | 94,145 | ..... | 100,460 |
| Southwest Texas | ..... | 38,545 | ..... | 37,855 |
| Eastern | 108,100 | ..... | 107,250 | ..... |
| Rocky Mountain Area | 114,290 | ..... | 109,220 | ..... |
| California— | | | | |
| Santa Fe Springs | 49,500 | ..... | 49,000 | ..... |
| Long Beach | 110,000 | ..... | 108,000 | ..... |
| Huntington Beach | 45,500 | ..... | 45,000 | ..... |
| Torrance | 6,000 | 22,500 | 6,000 | 22,500 |
| Dominguez | 21,500 | ..... | 20,500 | ..... |
| Rosecrans | 17,500 | ..... | 17,500 | ..... |
| Inglewood | 29,500 | 21,000 | 29,000 | 21,000 |
| Ventura Avenue | 33,500 | ..... | 32,500 | ..... |
| Remainder of State | 40,000 | 210,000 | 40,000 | 210,000 |
| Total California | 353,000 | 253,500 | 347,500 | 253,500 |
| Total United States | 1,499,111 | 534,105 | 1,482,557 | 540,550 |
| Grand Total | 2,033,216 | | 2,023,107 | |

**Total Increase, 10,109 Bbls.; Light Oil Increase, 16,554 Bbls.**


The OIL and GAS JOURNAL'S
WEEKLY CHART
showing estimated
DAILY AVERAGE PRODUCTION
of crude oil in the United States and estimated
DAILY AVERAGE LIGHT OIL OUTPUT
for 1925 and 1926
Production figures are indicated by dots of lines
1926 Production
1925 Production
Wortham's peak Jan 14, 1925 168,462 bbls
Smackover peak week ending May 29, 401,142 bbls
Inglewood peak week of Aug 1, '25 113,000 bbls
Garber peak Nov 22, 1925 72,662 bbls
1926 Light Oil
1925 Light Oil
DAILY AVERAGE PRODUCTION IN BARRELS (TOTAL)
LIGHT OIL
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER

WHAT AND WHERE TO BUY—PAGES 207-208-209

# Export Buying Strengthens Gasoline

## Large Purchases of Higher Gravities From Mid-Continent Refiners Stop Decline in Domestic Market. Kerosene Declines Rapidly

By Neil Williams

Extensive purchases of gasoline for export from Mid-Continent refiners during the week produced a stronger tone in the Oklahoma (Group 3) refined market and caused a generally improved outlook for June. Products other than gasoline, however, were unaffected, with no change in their general price trends.

Estimates of the amount of gasoline purchased are somewhat varied but it is known that sufficient material was ordered to prove of substantial benefit to present market conditions. Conservative checks on the purchase estimate the gasoline bought to be under 1,000 cars, or less than 8,000,000 gallons. However, other reports are to the effect that a much larger amount was bought.

The purchase was divided approximately half and half between the 64-66 375 and the 60-62 400 grades of gasoline, the bulk being purchased for the account of The Texas Company through a Tulsa broker. Most of the 60 gasoline was bought from Oklahoma refiners but the 64 grades were fairly well distributed among refiners of all districts of the Mid-Continent.

Orders for the 64 gasoline were placed on a basis of 12.05 cents Group 3 and 12.15 cents North Texas, which are the Standard Oil Co. of Louisiana (New Jersey) net postings at Baton Rouge. Reports of sales at 12½ cents were heard but these were not verified. The 60 material was bought in the Group at 11¾ cents with a few later orders as high as 12 cents.

These purchases were sufficient to remove considerable gasoline and with the additional purchase by the Galena-Signal Oil Co. of more than 100 cars of 64-66 375 gasoline and from 150 to 200 cars of U. S. Motor (58-60 437) gasoline by the Gulf Refining Co. in North Texas a generally better feeling prevailed.

The action of The Texas Company is taken by Oklahoma refiners as an indication that the service station and domestic demand for the company's new motor fuel is taking the output of its plants and that from now on this company will be forced into the open market to fill its export needs and will be an active buyer of higher gravity gasolines.

Whether this is so or not, the present purchase is considered one of the most important single orders in a year, at least since the Carter Oil Co. (Standard Oil Co. of New Jersey) placed orders for approximately 1,500 cars of U. S. Motor gasoline in the spring of 1925.

### Export Purchase Important

Although it may not be the largest purchase in several years, as is claimed by some, it probably will be of just as much vital importance considering the extremely weak markets of the past month. It climaxed one of the dullest market periods in some time and came when some market students almost had despaired of higher markets this summer.

Market students are somewhat divided as to the lasting effects of this purchase. There are some who believe that as soon as the extent of the purchase becomes known generally there will be a wave of domestic buying by jobbers and marketers who may anticipate tighter gasoline markets the next 30 days as a result of the large quantity of export material being moved.

On the other hand, there are those who hold the opinion the purchase will be filled by gasoline already in storage and as a result, unless further substantial

(Continued on Page 173)

### REFINED MARKET BAROMETER

Heavy purchases of gasoline, principally for export, in the Mid-Continent, is causing a generally stronger tone in refined markets of the country. This activity, one of the most important developments in refined markets for some time, is checking the gasoline weakness which has been spreading from the Mid-Continent to other refining centers. Domestic demand still is not up to expectation but the rapidly increasing motor consumption throughout the United States is expected to bring additional strength to the markets. Kerosene continues inactive with prices substantially lower almost generally. Fuel oils are dragging and soft except at eastern refineries where Diesel oil is stronger. Gas oil is firm due largely to the steady demand for cracking stock. Distillates, however, are quiet. Natural gasolines on the Pacific Coast developed a stronger touch and prices were higher despite the marked weakness in other areas, principally the Mid-Continent. Lubricants on the Gulf Coast are reduced from a ½ cent to 1 cent due to the summer slump in demand for zero cold test products. Prices were steady in other areas.

**Mid-Continent**—Export gasoline purchases strengthen gasoline markets. Spot domestic demand still light but contract shipments fair. Kerosene off another cent. Natural gasolines weaker following attempt of sellers to unload in north Texas. Fuel oils inactive and all prices lower. Gas oil firm due to recent purchases. Distillates steady.

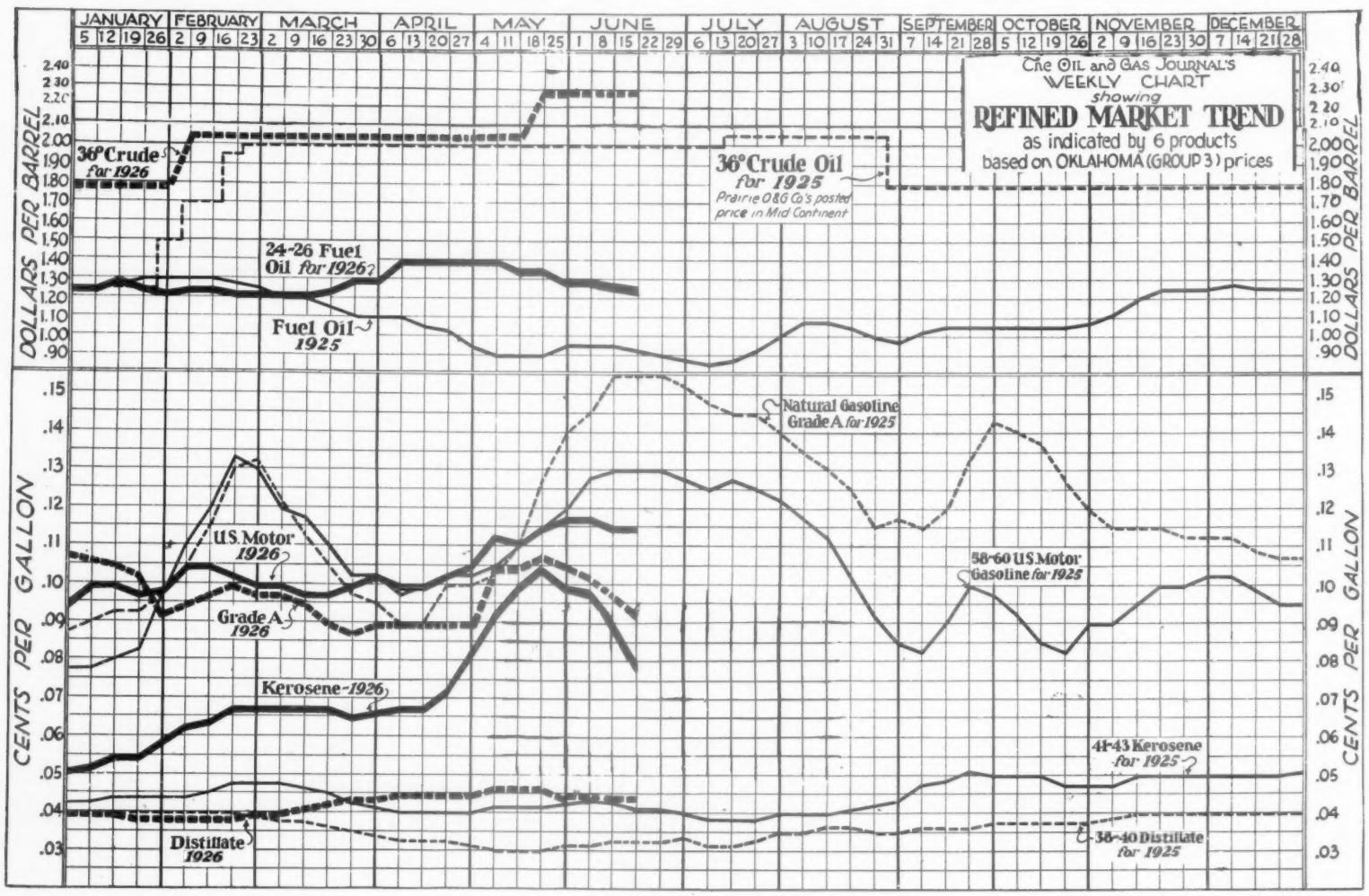
**Atlantic Seaboard**—Improvement shown in refined markets. Gasoline prices firm. Gas oil and Diesel oil strong. Kerosene dull but prices holding. Lubricant demand active. Wax firm. Petrolatum has better tone.

**Pennsylvania**—Gasoline prices holding own with demand light. Kerosene prices drop ½ to 1 cent. Wax stronger. Fuel oil quiet. Neutrals continue scarce but cylinder stocks softer.

**Chicago**—Spot gasoline demand still light but jobbers drawing heavily on contracts in anticipation of heavy motor demand this week. Export buying in Mid-Continent helps hold prices. Kerosene demand light. Distillates quiet. Gas oil unchanged. Fuel oil draggy. Lubricants firm.

**California**—Natural gasolines higher as stronger tone develops. Other products unchanged.

**Gulf Coast**—Lubricant prices off ½ cent to 1 cent due to summer slump in demand for zero cold test products. Fuel oil and gas oil unchanged.


The OIL and GAS JOURNAL'S
WEEKLY CHART
showing
REFINED MARKET TREND
as indicated by 6 products
based on OKLAHOMA (GROUP 3) prices
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER
DOLLARS PER BARREL
CENTS PER GALLON
36° Crude for 1926
36° Crude Oil for 1925
Prairie O&G Co's posted price in Mid Continent
24-26 Fuel Oil for 1926?
Fuel Oil 1925
Natural Gasoline Grade A for 1925
U.S. Motor 1926
Grade A 1926
58-60 U.S. Motor Gasoline for 1925
Kerosene-1926
41-43 Kerosene for 1925
Distillate 1926
38-40 Distillate for 1925

# Great Field for Petroleum Research

## Solving of Many Problems With Vast Saving in Money Warrants Extensive Study by Best Minds in Oil Business

By Charles K. Francis, Ph. D.
*Technical Editor*

The petroleum industry, including production, transportation, refining, and the use of petroleum products, is at the same time one of the most valuable of the world's industries; an important factor in the development of other industries and an agent which affects commercial and domestic problems of all people. It has made possible the development and perfection of a motor which has influenced civilization to an extent little thought of 25 years ago. The internal combustion engine, at first hardly more than a plaything, has advanced as a means for developing power from petro'eum, to a place in the business and social world where its importance and influence are introducing problems of major importance. The sociological results of the automobile include changes in living conditions, an alteration in the economic balance, broadening of education, and a lengthening of the span of life. The means and rate of transportation on land and water are being changed through the oil engine and the gasoline motor.

The discovery of fundamental facts and the development of scientific skill has been slow in all industries, in fact so slow that we can wonder what man could have been doing with his thinking apparatus in all the millions of years he is reported to have been on this globe. The railroads began to see the need for trained technical men about 75 years ago, the iron industry something like 50 years ago and the petroleum industry has made its greatest advancement within the last ten to fifteen years; real progress dating from the time when plant research was first established. The industry was really organized on the results of an investigation but unfortunately this atmosphere of inquisitiveness, as shown by Professor Silliman when he pronounced Pennsylvania crude to be an article of commercial value, did not remain with the petroleum industry.

### Conditions Changed Now

There are good reasons for this condition. There was little demand for petroleum products, and consequently the crude oil did not command a price much beyond its cost of production. The separation of petroleum products was a process requiring but little skill and there was no pressing need for the application of scientific principles and the practice of economy. The separation of petroleum products today, which are to meet exacting specifications, is no simple matter and the refiner is demanding the best of skill. Old ideas concerning production and the transportation of oil have become obsolete with the application of science and engineering. An English speaker has stated before the Institution of Petroleum Technologists that the petroleum industry dates from the time of the announcement of the Darwinian hypothesis and the discovery of the theory of the conservation of energy. No contribution has so influenced and moulded the thoughts of men as has the work of Darwin. It started an argument out of which has developed research work of lasting benefit to mankind. Today no scientist questions the truth of the law of conservation of energy, and the knowledge of this principle is of great importance to all industries. These two announcements came after long periods of thought and testing and one great benefit has been that they stimulated many investigators to greater effort.

### Scientific Progress.

While the petroleum industry was established under this favorable research atmosphere its advancement along scientific lines was very slow for nearly 50 years afterward. What progress was made has been largely because of the demands made upon it by other industries and seldom due to its internal efforts. The work of Professor Silliman pointed the way to obtain an illuminating oil that might replace those then in use which were derived from vegetable and animal material and coal oil. The use of gas and the invention of the electric lamp replaced kerosene but it is a blessing even today in many of the remote corners. When there was great demand for kerosene there was a light substance which must be first removed from the crude before it was possible to extract the kerosene. This lighter oil became a waste product and yet it is the thing that made possible the modern automobile, the greatest single creation which has been invented for the benefit of man. In turn the automobile industry has created business of such magnitude for the petroleum industry that every effort must be put forth to develop and conserve. The United States Geological Survey has estimated that since the starting of the industry there has been spent a total of $4,900,000,000 more for the production of petroleum than the sale of production has returned. There is an annual expenditure of approximately $50,000,000 in excess of the value of the oil produced in an effort to maintain production at an essential level. There are the immense losses by fire and evaporation. Transportation, manufacturing and handling losses are often preventable. These facts are alone sufficient to warrant extensive research.

### Manning Fostered Research

Discussion has for the past several years prevailed in the petroleum industry regarding the ways and means for establishing a comprehensive research plan for the benefit of the industry. Dr. Van H. Manning, formerly director of the United States Bureau of Mines and research director of the American Petroleum Institute, is entitled to much credit for his devotion and untiring efforts to obtain funds and support for this work. The establishment of the fund of $250,000 by John D. Rockefeller, to which was added another $250,000 by the Universal Oil Products Co., is said to be a direct result of the efforts of Doctor Manning.

The very interesting story of the manner in which Mr. Rockefeller was induced to establish this work is not widely known. What happened was that after hundreds of men were convinced of the necessity for a benefactor, either in the form of the Government or individuals, it was Mr. Manning who arose to the emergency. He is a man of high scientific standing, and a business man who knows how to get things done. Finally with statements in his possession, the details of which have never been made public, he made a trip to Florida to lay his case before Mr. Rockefeller. These statements represented the views of the Geological Survey, the Bureau of Mines and the Bureau of Standards, all of which of course, had the support of the American Petroleum Institute. They showed the ignorance that prevails in respect to many fundamental problems relating to petroleum; they gave hope and confidence that this unfortunate condition might be dissipated through research and the consequent interchange of knowledge. A single sitting convinced Mr. Rockefeller. Although without scientific training, he

(Continued on Page 131)

# Handling Amarillo Oil Big Problem

## Pipe Line Difficulties May Necessitate Building Refineries in the Field and Shipping Finished Products

By J. L. Dwyer
*Staff Correspondent*

AMARILLO, Tex., June 12.—In a recent article, K. C. Heald, prominent geologist, told of an old professor who, when approached by a student with any proposition, asked, "How do you know?" and when that query was answered, asked, "Well, what of it?" In considering the Panhandle Field in Texas, the first question can be disposed of easily by showing the pipeline runs, but the second is not so easily handled.

The Panhandle is approaching a daily production of 50,000 bbls., and what significance it has upon the crude oil situation is a matter of doubt. The pipeline question in this field is unusually interesting for it is going to present an opportunity for some mechanical genius to rise from obscurity, should he be able to advance some method which will insure continued operation during all seasons.

The Panhandle oil congeals and stacks up solidly at a temperature of 55 degrees Fahrenheit, and in this respect it differs greatly from any other high gravity field in petroleum annals. It presents sturdy opposition to the pipeliners in the winter season for the Panhandle region gets cold with a capital C. There is a saying in this vicinity that in winter there is nothing between the Panhandle and the north pole but a lot of barbed wire fences and that most of them are broken down.

### Pipeline Facilities

This fact has deterred the entry into the field of any line from the Mid-Continent Field; and it is generally agreed that a major pipeline connection from Oklahoma or Texas would prove the greatest stimulant that the field could have.

At the present time there is little worry about pipeline facilities but with the 400 rigs and drilling wells, and the steadily mounting production; another 30 days may tell a different story, for the present pipelines are taxed to capacity, and they only run from the field to loading racks. All the production of the field is being shipped in tank cars. The most of it goes to Texas refineries on the Gulf Coast. The Amarillo Refining Co. has a 5,000-bbl. refinery at Amarillo, the only plant in the Panhandle. This plant is running an average of 3,000 bbls. daily.

The present production of the field is being run by various lines as follows:

| Company— | Bbls. Daily |
|---|---|
| Marland Oil Co. (Kay County) ..... | 13,000 |
| Magnolia Pet. Co. ..... | 8,000 |
| Pantex P. L. Co. ..... | 6,000 |
| Plains P. L. Co. ..... | 10,000 |

At the time the Gulf Refining Co. purchased a half interest in the properties of the Panhandle Producing & Refining Co., it was rumored that the Gulf interests would build a pipeline from its Wichita Falls station to the field, a distance of over 300 miles. The balmy spring days have turned to summer and the Gulf has not even made a preliminary survey for the line. While no official corroboration can be obtained it is reported that after considering all sides of the Panhandle problem, it is very likely that the Gulf will build a refinery in the field and refine the oil there. Other smaller interests have decided to establish small plants in the field, and one operator from Tulsa who considers entering the field and purchasing some crude, believes that a small plant carefully erected and efficiently operated will be a good investment. In considering this plan he stated that he would only build the kind of plant which would pay for itself in eight months or a year.

In considering the refining situation in the field there is no room to doubt that the only way to profitably refine the oil is to erect cracking units to dispose of the heavy ends. The Panhandle crude gives a substantial yield of gasoline in the usual skimming operations. Due to the large wax content of the crude, however, refiners are confronted with a problem in handling the residuum or low gravity overhead cuts after the gasoline has been skimmed off. It is believed that the practical method of handling these heavy ends is to crack them. The residuum from the cracking process is a product of low cold test.

It is very likely that several small refineries such as the one outlined above will make their appearance in the Panhandle; and in spite of the improved appearance of the field, it is noticeable that no movement has been made by any of the major pipeline systems to extend a line from the Mid-Continent. This would seem to indicate that the difficulty of operation has not been successfully disposed of and the pipeline executives evidenlty believe that the logical manner to handle the oil is to refine it on the spot, and ship the finished products.

Even in good weather the Panhandle oil is not easily transported by pipelines. The Magnolia Petroleum Co. built a 6-inch line from the field to a loading rack, and the first 30 days of its operation an average of 2,000 bbls. was all that could be run through it. At this time the Magnolia line is averaging 5,000 bbls. daily, and this figure does not approach Mid-Continent speed. If this is all that may be expected of the line in summer weather, what may we look for in the cold weather?

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# Geophysical Methods for Finding Oil

## Torsion Balance Gives Good Results in Flat Country, Must Prove Usefulness in Areas Like Oklahoma and Kansas

By Charles E. Kern
*Washington Bureau, The Oil and Gas Journal*

WASHINGTON, D. C., June 14.—"Interest in geophysical methods for the discovery of hidden oil fields has naturally been greatly stimulated by the success of the torsion balance and seismograph in disclosing the presence of concealed salt domes in the Gulf Coast region, particularly as subsequent exploratory drilling has revealed the presence of oil in association with a number of these saline domes," replied W. T. Thom, Jr., geologist in charge, Geology of Fuels, United State Geological Survey, when asked to comment on the present uses and future prospects of the seismograph and torsion balance.

"The first success registered by the torsion balance in the Gulf region is reported to have been the discovery of the Nash Dome in Fort Bend County, Texas, located by the Rycade Oil Co. in July, 1924. This was followed in December of the same year by the discovery of the Orchard Dome, also in Fort Bend County, by the Gulf Production Co., which used a seismograph outfit in locating the dome.

"Since 1924 a number of other salt domes have been similarly discovered by torsion balance and seismograph and the questions therefore naturally arise: (1) How generally applicable are such geophysical methods in the search for oil? (2) How do the various appliances developed operate? (3) Under what conditions will they yield valuable results? (4) Wherein do they differ from the "doodle bugs" which have so long been a delusion and a snare to the unwary?

### Not in Doodle Bug Class

"To answer the last question first: A 'doodle bug' operates by some sleight-of-hand; or in some dark and secrety way; or on some pseudo-scientific principle, and is supposed to miraculously reveal just where oil is or is not, and usually just how deep it is. In contrast to which, appliances, such as the torsion balance and seismograph are controlled by simple and well known physical principles and their recent success is merely due to the fact that they have been, through research, adapted to use in surveying under certain rather special conditions.

"It remains to be demonstrated that the torsion balance and seismograph can be successfully used in the search for oil outside of the Gulf Coastal Plain; the torsion balance because it may be affected by irregularities of the surface of the ground quite as much as it is by irregularities below the surface, and the seismograph because each rock layer of different hardness and density gives a different vibration record, and when alternating hard and soft layers are present the record may become so complex to be impossible of interpretation. The use of sound waves, and of local differences in the force of gravity as a means of locating structure are yet in the experimental stage, and earth temperature measurements can only be obtained as a possible guide for exploration where holes of at least moderate depth have been drilled. However, all three have possibilities of being widely applicable, and all appear to be distinctly more promising than any method for making use of earth magnetism, or of the electrical properties of the ground as a guide for oil exploration.

### Geophysical Appliances

"Geophysical appliances being tested may be divided into two general classes on the basis of the physical principles controlling their operation. One class of instruments like the torsion balance is controlled by forces such as gravity, or magnetism, exerted by objects at greater or less distances from the recording instrument, whereas the second class consists of appliances operated by earth tremor, sound waves, electric currents and the like, which pass with different speeds and in different ways through the various kinds of rock composing the earth's crust.

"To interpret the records afforded by any of the instruments with even approximate accuracy one must be intimately acquainted with the general geologic conditions in the region being studied, in order that the significant facts revealed may be considered and all others be disregarded.

"Three steps must be successfully taken to obtain valuable results from the torsion balance or from a similar appliance.

"(1) Initial observations must be made with extreme accuracy, (2) very careful and complicated corrections must be made to exclude nonessential elements from the equation to be solved and (3) the corrected result must be interpretated by the the geologist on the basis of his experience, thus giving a final answer which is a statement of probabilities rather than of certainties.

"Before being used extensively for exploratory work the seismograph and torsion balance were tried out at Spindletop and at other places where the underground structure had been revealed by drilling, and the methods to be used were thus given a practical field test.

"None of the methods so far devised seems to promise to indicate directly the location of oil and gas under ground; their effectiveness merely being proportionate to the accuracy with which they may disclose the location of hidden anticlines, domes, or faults, which may have caused the accumulation and preservation of bodies of oil or gas.

### The Torsion Balance

"If a torsion balance be set up near a hidden salt dome it should show an irregularity in the horizontal pull of gravity toward the dome, because the salt core of the dome has a density different from that of the surrounding sands and clays. And if a number of such observations all show irregularities pointing toward a common center it would strongly suggest the presence of the dome.

"Similarly, as earth tremors set up by an explosion travel with different rapidities through different kinds of rock, the varying rates at which the earth waves reach recording instruments set at points near a place where a charge of dynamite is exploded, indicate some local abnormality below the surface, and

(Continued on Page 173)

## STANDARDIZATION COMMITTEES CONFER AT COLORADO SPRINGS

COLORADO SPRINGS, Col., June 15.—There is an atmosphere of determination among the members attending the second semi-annual conference of the Special A. P. I. committees on the Standardization of Oil Field Equipment to bring out of the present meeting in this city something that will further simplify oil field equipment and improve the methods of application and use to the end that the industry may operate more efficiently and economically.

About 175 reservations have been made and well over 200 interested are expected to attend. Over 100 registered last night from all parts of the country. Ohio, Pennsylvania, the Gulf Coast, Louisiana, Texas, Oklahoma, the Rocky Mountain area, California and the oil country generally are well represented by committee members. The manufacturers are especially well represented by executives and engineers.

Among the early arrivals were J. Edgar Pew, chairman of Committee No. 5, Oil Country Tubular Goods; Captain J. F. Lucey, chairman of Committee No. 7, Rotary Drilling Equipment; Walter W. Fondren, chairman of Committee No. 4, Standard Rigs and Derricks; C. C. Sharpenburg, chairman of Committee No. 9, Wire Lines and Manila Cordage, and A. B. Steen, chairman of Committee No. 2, Oil Field Boilers.

These national committee chairmen arrived in advance to make preparations for three days of continuous effort to arrive at intelligent and practical conclusions in order that recommendations may be made before the next annual meeting.

The greater part of the tubular goods program has been adopted and put in use by several of the larger companies, only minor details now being considered, such as line pipe recommendations, gauging methods and working up rephosphorized pipe.

The Rig Irons Committee, No. 6, of which H. J. Lockhart is chairman, has practically completed its specifications and hopes to make final recommendations before the next meeting.

The preliminary meeting of the steel derrick manufacturers to prepare a common code for the computation of loads which the steel derrick will withstand was held yesterday. Operators feel this is an important point.

Today each national committee will have reports of engineer members on research in specific problems and take such action as may be necessary to constructively bring the specifications toward completion.

Committee No. 1 on Belting of which A. H. Riney is chairman and Committee No. 3 on Cable Drilling Tool Joints, of which Thomas Fleming, Jr., is chairman, are also considering their problems. Tentative specifications are being carefully reviewed in all the committee meetings.

## AMARILLO BOOSTERS SPREAD INFORMATION ABOUT TEXAS PANHANDLE

One of the features of the national convention of the National Association of Real Estate Boards, held in Tulsa last week, was the activities of the large delegation from Amarillo, Tex. These men, fresh from the scene of the greatest oil boom at this time, helped dissipate any impression which may have prevailed that Amarillo was merely an oil boom town. The realtors came to know this thriving Panhandle city as a real metropolis with a substantial growth and future.

# Distillate Prices for Coming Season

## Buyers and Sellers Unable to Agree on Contract Terms. Several Factors Will Determine Future Market Trend

By C. O. Willson

For the past month the Mid-Continent refiners and the jobbing industry of the Middle West have been confronted with their annual problem of distillate prices for the coming season. The buyers and sellers usually find themselves "up in the air" in regard to distillates—commonly known as furnace oils—at this time of the year. The present situation does not differ materially from previous years except perhaps that those concerned are a little higher in the air than usual.

Jobbers have been seeking contracts ever since their old agreements expired in April. They desire to secure agreements with the refiners so that they in turn will have a basis on which to solicit business from the householders and other consumers of distillates as fuel. A few jobbers at least have said they will not handle the distillates the coming season unless they are able to secure contracts from the refiners giving them an assured supply at a price which will show little fluctuation during the period between September 1 and May 1, the maximum consuming period in all the consuming areas.

The jobbers usually prefer a flat price or a price which will not vary more than ½ cent between the high and low. In their anxiety to secure some definite basis on which to base their own sales, flat offers as high as 5 cents are reported to have been offered by the buyers during the past few weeks. The 5-cent basis, as shown in the accompanying table, is considerably more than the average prices which have prevailed during the past four years based on open market quotations.

Refiners generally are refusing to consider any type of contract except that based on the open market as determined by trade journal quotations. This attitude on the part of the Mid-Continent refiners has become more and more general during the past three years and at the present time is almost a 100 per cent proposition. Developments later in the summer and fall may change this attitude somewhat but it now appears that the bulk of the distillate business for the coming year will be done on an open market basis.

### Contracts Last Year

Long time contracts, other than those based on the spot market last season regardless of the terms generally proved more favorable to the buyer than to the seller. Several refiners had contracts over the season based on the open market with a 3½-cent minimum and a 4-cent maximum. The open market price was never under 3½ cents during the season and was above the maximum for a considerable period. These refiners without exception for obvious reasons are refusing to renew the agreements for another year.

Contracts which took into consideration the crude price changes or the posted tankwagon market on distillates of the major distributors were also unasstisfactory from the viewpoint of the seller. The large distributors in the Middle West last season saw fit to maintain a relatively low tankwagon market in the sale of distillates. The explanation given is that these major distributors desire to give their customers a uniform price over the season regardless of advances in tank car prices as established by the independent refiners. It is also explained that they keep the price as low as possible in order to increase the number of distillate burner installations which are a long way from a saturation point provided costs are not prohibitive. Costs with distillate burning are already generally higher than coal and despite the many offsetting advantages it is apparent that the larger sellers fear the reaction if prices were advanced to higher levels. The result has been that the independent distributor without refinery connections has generally been compelled to operate on a narrow margin between the tank car and tankwagon quotations.

The fear of the average jobber at the present time is that even this narrow margin will disappear during the coming year and he will be compelled to handle this distillate business at a loss. They have been assured by their refinery connections that higher tank car prices are inevitable with no assurance that there will be a compensating advance in the tankwagon schedules as determined by the major companies which have their own refineries and distributing facilities.

### Higher Prices Expected

This attitude as to higher prices for distillates suitable as fuel for domestic burners is general among the refining and marketing fraternity. It is the main reason why refiners are unwilling to consider any agreement except that based on the open market.

At least a few market observers have deplored this feeling of uncertainty in regard to the future which if not remedied may seriously affect both the independent refining and marketing fraternities. These observers point out the necessity of the refiners having an outlet for that fraction of crude oil suitable for distillate and this is only possible when the jobbers are given some protection in the distribution of the product.

Regarding high prices they believe that market conditions of the past few months have resulted in a distorted outlook as to the future. Somewhat higher prices are probable provided crude oil prices do not slump before the winter months, but they do not anticipate any runaway market in distillates regardless of developments in other products.

### Eastern Situation

In the East where the sale of distillates to consumers is more centralized in the hands of a few large companies than it is in the Middle West the market is not upset. Some of the largest distributors have been making contracts with household, apartment house and office building owners for several weeks covering their requirements for the coming season. Generally these contracts call for a flat price which is from 1 to 1½ cents over last year. This advance is believed to be justified by basic conditions in the oil industry and at the same time is not great enough to affect the demand which is rapidly increasing. This development in the eastern market in itself should dispose of wild predictions heard in the western areas.

As previously explained, the future attitude toward distillate prices is largely based on the advances which have taken place since the first of the year. As everyone in the refining and marketing fraternity knows prices on all refined products from kerosene down to fuel oil, have been exceptionally high during the past few months when compared to gasoline prices. Many are apparently assuming that this situation is to continue and are considering future business only on that basis.

### Kerosene Situation

Students of market conditions, however, believe that regardless of present conditions, several factors which will affect future markets deserve consideration. Some have assumed that kerosenes which started to advance about six months ago and reached the point in the middle of May where Mid-Continent tank car prices were almost on an equality with gasoline, would continue to maintain that relative price position. Since kerosene and distillates are closely allied in refinery operations, these high kerosene prices have been pointed out as indicating what will happen to the distillate market this fall.

In regard to kerosene most market observers agree that the high prices are temporary. Nothing has developed either in the manufacturing processes of the refinery or the demand for the product which would justify prices closely approximating gasolines. In the Mid-Continent Field a reaction in kerosene price trends started about the middle of May and this will no doubt continue until a more normal relationship is obtained.

The higher kerosene prices have been explained as a development of cracking in refinery operations. It is agreed that as cracking becomes more and more general fuel oil, gas oil distillate as well as kerosene prices will come closer to gasoline prices.

### Gradual Development

This is a gradual development, however, based on changes in refinery costs and does not justify as a permanent proposition large over night advances in the heavy end products which in the case of kerosene meant more than doubling the Mid-Continent tank car price within a period of six months.

In this connection a brief resume of kerosene price trends and statistical developments as shown by the Bureau of Mines throws some light on what may be expected in the future. The Government reports show there was a steady increase in kerosene stocks over the greater part of 1924 and the early part of 1925. This situation developed during that period despite the fact there was a widespread increase in cracking installations throughout the country and a normal increase in kerosene demand.

Due to this unhealthy situation in regard to supply and demand prices were low. In the Mid-Continent average prices in 1925 on kerosene were lower than in 1924 based on The Oil and Gas Journal weekly quotations, although crude prices were from 15 to 20 per cent higher. The fact that gasolines, fuel oils, gas oils and even distillates were higher in 1925 than in 1924 did not prevent the unsatisfactory price situation in regard to kerosenes.

The inevitable development of these low kerosene prices was a decrease in production. Kerosene production in the United States dropped from 247,727,000 gallons in January of 1925 to a low of 187,984,000 gallons in July of the same year. Stocks, however, continued to climb until June of that year when a high of 472,371,000 gallons was reached. At that point an improved late summer and fall demand including exports with no offsetting increase in production, brought about a steady decline in stocks. Early in 1925 it is known that many refinery organizations including several of the larger companies greatly reduced their kerosene output due to the low prices. In a few instances at least the refiners bought kerosene for their own current needs rather than manufacture the product at their own plants.

A temporary famine generally follows an overproduction in the oil business and the kerosene situation was no exception.

The curtailment of kerosene output with a normal increase in demand brought about a scarcity which was reflected in price trends over the latter half of 1925. Production also started to increase but it did not catch up with demand until February of this year. In the meanwhile large withdrawals from stock brought about a situation in several areas including the Mid-Continent in which it was possible to advance prices higher and higher. Stocks for the country as a whole have been increasing since February, however, and the break in prices started in May.

Just where the adjustment in gasoline and kerosene prices now under way will stop, it is not possible at this time to predict. This adjustment can be brought about either by higher gasoline or lower kerosene prices. At the present time it appears that this adjustment, for the

(Continued on Page 84)

### FURNACE OILS IN 1926-1927

With the 1925-1926 season just closed refiners, distributors and consumers of furnace oils are already manifesting interest in the market for the coming season which opens September 1 and ends May 1, 1927. The large number of burner installations point to an increase in consumption of from 25 to as high as 50 per cent in different parts of the country.

In the East the large distributors are making contracts with consumers for the season on a flat basis. These agreements generally give the seller from 1 to 1½ cents per gallon over last year.

In the Middle West few, if any, contracts are being made with consumers because of the uncertainty which exists in regard to the open market tank car price at refineries. The latter fear that prices will be much higher and are unwilling to contract on the basis of former years.

In the accompanying article the writer gives the viewpoint of those who expect prices to be slightly higher than last year but are not anticipating a run-away market in distillates. The basic conditions in refinery practices including the probable trend in kerosene prices and the value of distillate as charging stock for cracking equipment are among the several factors discussed.

### DISTILLATE PRICES

The following table gives the average monthly prices on 38-40 straw distillate in Oklahoma for the years 1922, 1923, 1924, 1925 and 1926. The prices are based on the low weekly quotations of The Oil and Gas Journal. Since there is generally a spread of ⅛ to ¼ cent in distillate prices, the high average prices would be that much higher. Prices given in cents per gallon.

| Month— | 1925 | 1924 | 1923 | 1922 |
|---|---|---|---|---|
| September .... | 3.625 | 3.475 | 2.812 | 3.349 |
| October ..... | 3.75 | 3.916 | 2.775 | 3.55 |
| November .... | 3.969 | 3.531 | 2.75 | 3.5 |
| December .... | 4. | 3.725 | 2.812 | 3.375 |
| | 1926 | 1925 | 1924 | 1923 |
| January ..... | 3.906 | 3.969 | 3.75 | 3.75 |
| February ..... | 3.906 | 4. | 4.096 | 4.094 |
| March ..... | 4.225 | 3.6 | 3.031 | 3.031 |
| April ..... | 4.5 | 3.5 | 3.5 | 2.85 |
| Average .... | 3.985 | 3.714 | 3.191 | 3.437 |

XUM

# Trend of Refining in United States

## Essentially a Four Product Industry With Different Conditions Obtaining in the Ten Main Areas

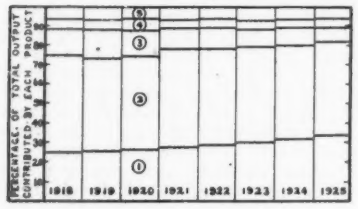
By Charles E. Bowles
*Petroleum Analyst, The Oil and Gas Journal*

Much publicity has been given to the fact that several hundred distinct products are made from crude oil—but the fact remains that the refining industry is essentially a "four product" industry—in fact it is practically a "two product" industry as the following tabulation, based on 1925 operations shows:

| | Recovery Per Cent |
|---|---|
| Gasoline | 33.8 |
| Fuel oil | 47.5 |
| Kerosene | 7.8 |
| Lubricating oil | 4.1 |
| Total | 93.2 |

In comparing the 10 graphs making up this series of articles it is clearly apparent that even in adjoining refining areas radically different conditions prevail, and that each refining area has its own particular problems to solve.

Regardless of the general impression that the refining industry is "pretty much the same in every part of the country" the following table, compiled from data used in writing the 10 preceding stories, clearly illustrates that conditions are not the same, even in adjoining areas.




| Area— | Gasoline | Fuel Oil | Ttl. |
|---|---|---|---|
| Arkansas-N. La. | 19.2 | 69.6 | 88.8 |
| California | 22.6 | 69.3 | 91.9 |
| Louisiana-Gulf Coast. | 23.4 | 51.3 | 74.7 |
| East Coast | 32.3 | 45.9 | 78.2 |
| Texas Gulf Coast | 36.6 | 44.9 | 81.5 |
| Inland Texas | 37.6 | 48.4 | 86.0 |
| Pennsylvania | 40.4 | 22.9 | 63.3 |
| Oklahoma-Kansas | 46.2 | 35.8 | 82.0 |
| Rocky Mountain | 48.0 | 37.0 | 85.0 |
| Indiana-Illinois | 49.8 | 27.2 | 77.0 |
| United States | 33.8 | 47.5 | 81.3 |

### Fuel Oil and Gasoline

It is thus seen that in the first six of the above refining areas a larger percentage of fuel oil than gasoline is recovered—and that in the last four areas more gasoline than fuel oil is recovered—while for the United States as a whole about one-third of the entire refinery throughput comes out gasoline and a little less than 50 per cent fuel oil.

During the eight years covered by this series there has been a slow but sure shift in the percentage recovery of the four major products from "the average barrel" of crude oil.

| | 1918 | 1925 |
|---|---|---|
| Gasoline | 24.6 | 33.8 |
| Kerosene | 12.6 | 7.8 |
| Fuel oil | 50.4 | 47.5 |
| Lub oil | 5.8 | 4.1 |
| Total | 93.4 | 93.2 |

The foregoing percentage recoveries are based on "net runs" to stills—and indicate clearly that the increased recovery of gasoline has been almost entirely at the expense of kerosene and fuel oil.

In studying the large graph herewith it is extremely interesting to note the almost parallel up-trend of the production lines for gasoline and fuel oil—and the almost parallel horizontal trend of kerosene and lubricating oil. The following tabulation shows the relative change in these four major products in the past eight years—all amounts in gallons:

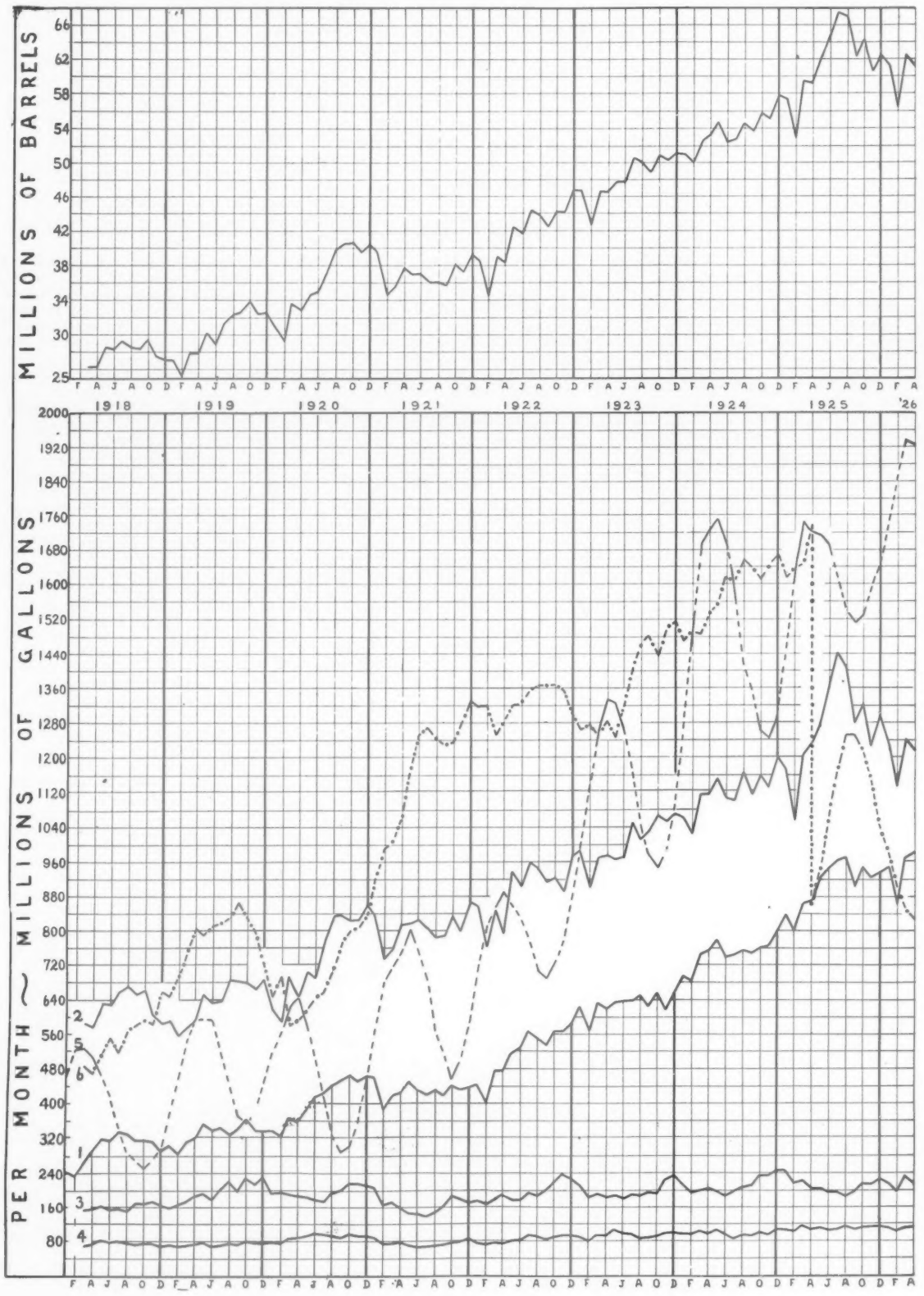
| Item— | 1918 | 1925 |
|---|---|---|
| Gasoline | 2,570,313,000 | 10,886,127,000 |
| Fuel oil | 7,321,398,000 | 15,279,072,000 |
| Kerosene | 1,825,360,000 | 2,510,334,000 |
| Lub oil | 841,466,000 | 1,301,016,000 |
| Net runs (bbls.) | 346,000,000 | 766,000,000 |

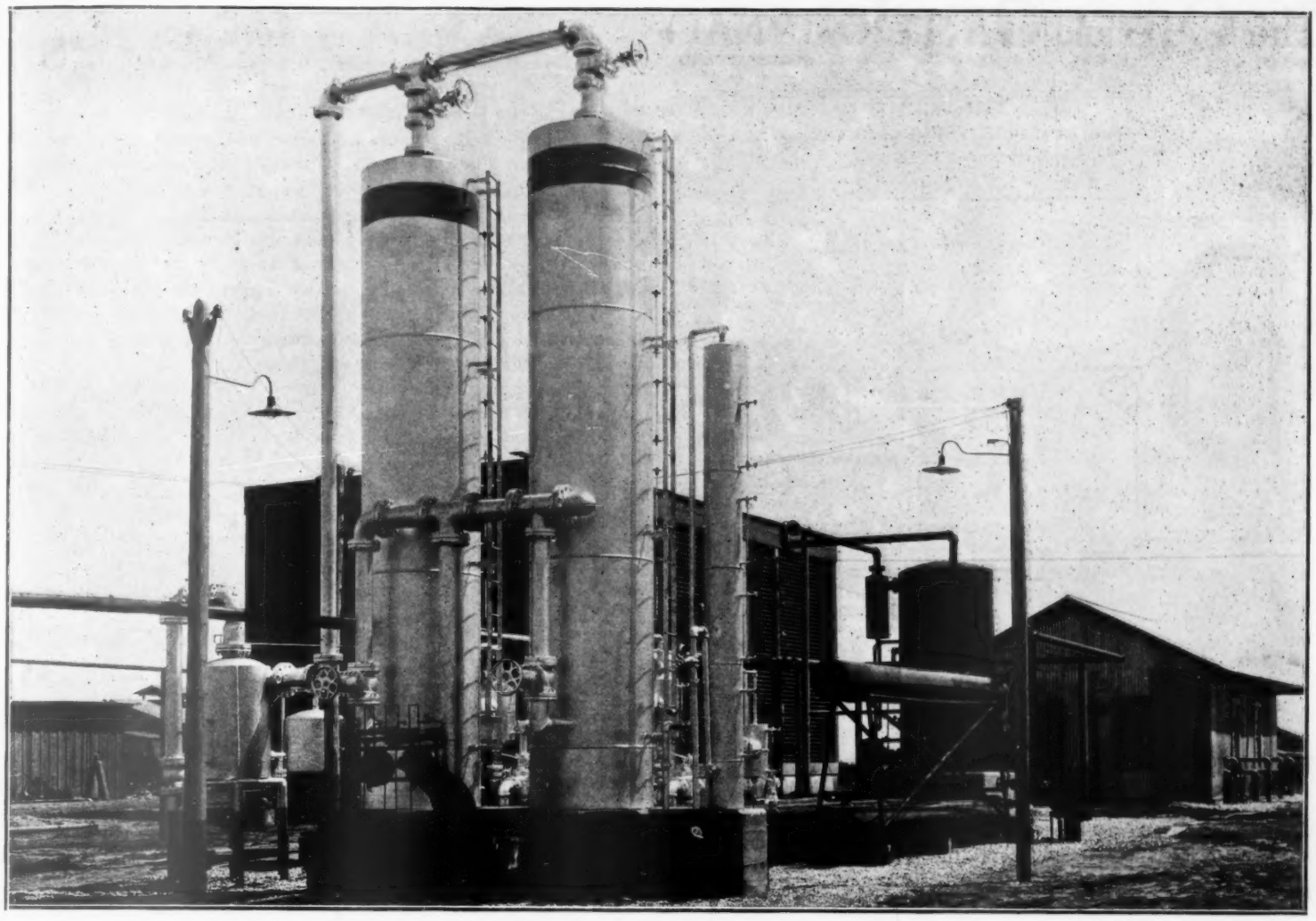
The net result of this eight-year shift is that in 1925 the output of gasoline is three times as much as in 1918—fuel oil twice as much as in 1918—while kerosene output has increased less than 40 per cent and lubricating oil about 50 per cent.

Nothing could more clearly reflect the changing conditions in the "petroleum using industries" than the foregoing change in the proportionate output of the four major products of the petroleum industry itself.

The story back of the difference between the trend of the storage lines of gasoline and of fuel oil throws an interesting side light on the industries built around these two petroleum products. Tracing the "up in the spring and down in the fall" swings of gasoline stocks one finds ample proof of the "seasonal"

(Continued on Page 178)





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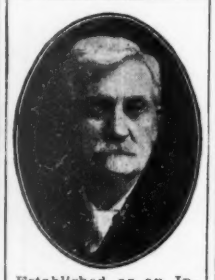
TULSA, OKLA.

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## DEARER CRUDE BUT CHEAPER GASOLINE

So the Federal Trade Commission, on motion of the Senate, is going to hold another investigation of gasoline prices.

Not because there is anything unusual about the price of gasoline just now. Not because it is excessive, as compared with other commodities since 1913 to date it has been and is below the average.

The President's Oil Conservation Board has just completed the most thorough inquiry into the entire oil situation that has ever been undertaken. The preliminary report of that board is to be made to the president within a very short time and the whole report before Congress meets in December.

If there is anything about the oil business that board has overlooked the industry would like to know what it is. The board has had the fullest co-operation from the industry in getting at the facts.

Why, then, this hullabaloo in the Senate and the renewed clamor for another investigation?

Well, congressional elections are to be held next fall. Senators have been known to get elected after making a grandstand play about gasoline prices. If it worked once it may work again.

To be sure there have been a dozen or more investigations of gasoline prices and there has not been a single instance where the price was altered a fraction of a cent as a result.

The Federal Trade Commission itself conducted an inquiry a couple of years ago and the public certainly has no recollection of getting its gasoline a particle cheaper in consequence.

In fact, when you recall all the investigations of prices of this and that in the past 20 years, you cannot remember a single case where the price of any commodity was affected a cent's worth.

You might think everyone knew this, and everyone does, but the politicians have used it to fool the people so often that it has become part of their regular stock in trade. When they have not any worthwhile issue to argue or any sufficient reason to ask the public to elect them, they work up a lot of indignation about gasoline prices without knowing anything about them and a gullible public swallows it as gospel.

The oil industry thus attacked seems a safe target. It is the victim of years of vituperation, repeated so often that it has come to be believed without question.

When this latest investigation was ordered in the Senate there was but one member protested its uselessness and injustice. The rest, no matter what they thought, seemed afraid to challenge the proposal, presumably lest they should appear as trying to block this investigation.

That is the weak spot in the whole business. When an investigation is proposed, friends of the industry find themselves in a false position. They are made to seem as if anxious to prevent an inquiry and more harm than good results.

The fact is, as has been pointed out so often in these columns, the industry cannot afford to wait until an investigation is proposed. It must keep the facts about its prices before the public in season and out until the people are thoroughly educated.

It is worse than useless to throw a mass of figures at the public in answer to a lot of sweeping charges of arbitrary and unwarranted prices.

People convinced of the general truth of these charges are suspicious of figures they do not understand and will not take time to study. They are regarded as so much dust thrown in their eyes.

Happily in the present instance the industry has found a spokesman in the White House whose opinions have influence. The President realizes that with the Senate ordering an inquiry the most effective way of dealing with the matter at this late day is to go along with it. Although frankly doubting that the inquiry will accomplish anything toward bringing down gasoline prices (the former one in his administration having conspicuously failed to alter the effect of the law of supply and demand) he has signified his willingness to have the Federal Trade Commission act.

At the same time the White House spokesman pointed out that the price of petroleum had gone down in recent years because of an overproduction and that with failure to find new fields and the extraordinary increase in the use of automotive vehicles, which are transporting more people than the railroads, demand is rising while the supply is not.

Coming from the White House this may make some impression on the public mind, preparing it for a few plain facts from the oil industry as to the why of gasoline prices today.

The high prices for both crude and gasoline were touched in 1920. Crude in the Mid-Continent reached $3.50 and in Pennsylvania $5.75. Gasoline at the tankwagon in 50 representative cities in 46 States was 29.4 cents and at the service stations 31.4 cents.

In May, this year, Oklahoma crude averaged $2.50 and Pennsylvania $3.55. Gasoline in the same 50 representative cities in 46 States on June 1, 1926, was selling at 19.06 cents tankwagon and at the service stations for 21.06 cents, exclusive of tax.

The tax on gasoline runs as high as 5 cents a gallon and averages for the entire country (four States having no tax) 2.43 cents a gallon. Speaking of the cost of gasoline, the public should give a thought to this added burden imposed by themselves.

In 1920, when crude and gasoline prices were at their peak, fuel oil was bringing as high as $3.50 a barrel in the Mid-Continent and more in the East; kerosene 13 cents a gallon and distillates 10 cents. Today fuel oil of the same grade is bringing only $1.45, kerosene 10 cents and other products in proportion.

Any business man can figure that with the present cost of crude and the prices obtained for other products of the refiners the present price of gasoline is being kept down to the barest minimum.

With $2 crude in April, 1923, the tankwagon on gasoline was 21.5 cents, against only 19.6 cents with $2.50 crude in 1926.

Does that look like arbitrary and unwarranted advances? The consumer today is getting cheaper gasoline from crude 20 per cent higher than three years ago.

Despite the price of raw material which is fixed by supply and demand the refiner has so improved his processes that he has been able to take up the increased service given motorists at the filling station and yet sell a better gasoline for less than a few years back.

These are facts the Federal Trade Commission can discover if it will go into the matter straightforwardly. They are a matter of record. They can be found without any prolonged series of questionnaires interfering with the refiners' regular business of providing the public with the cheapest power the world has ever known. And they will be a complete answer to the Senate resolution.

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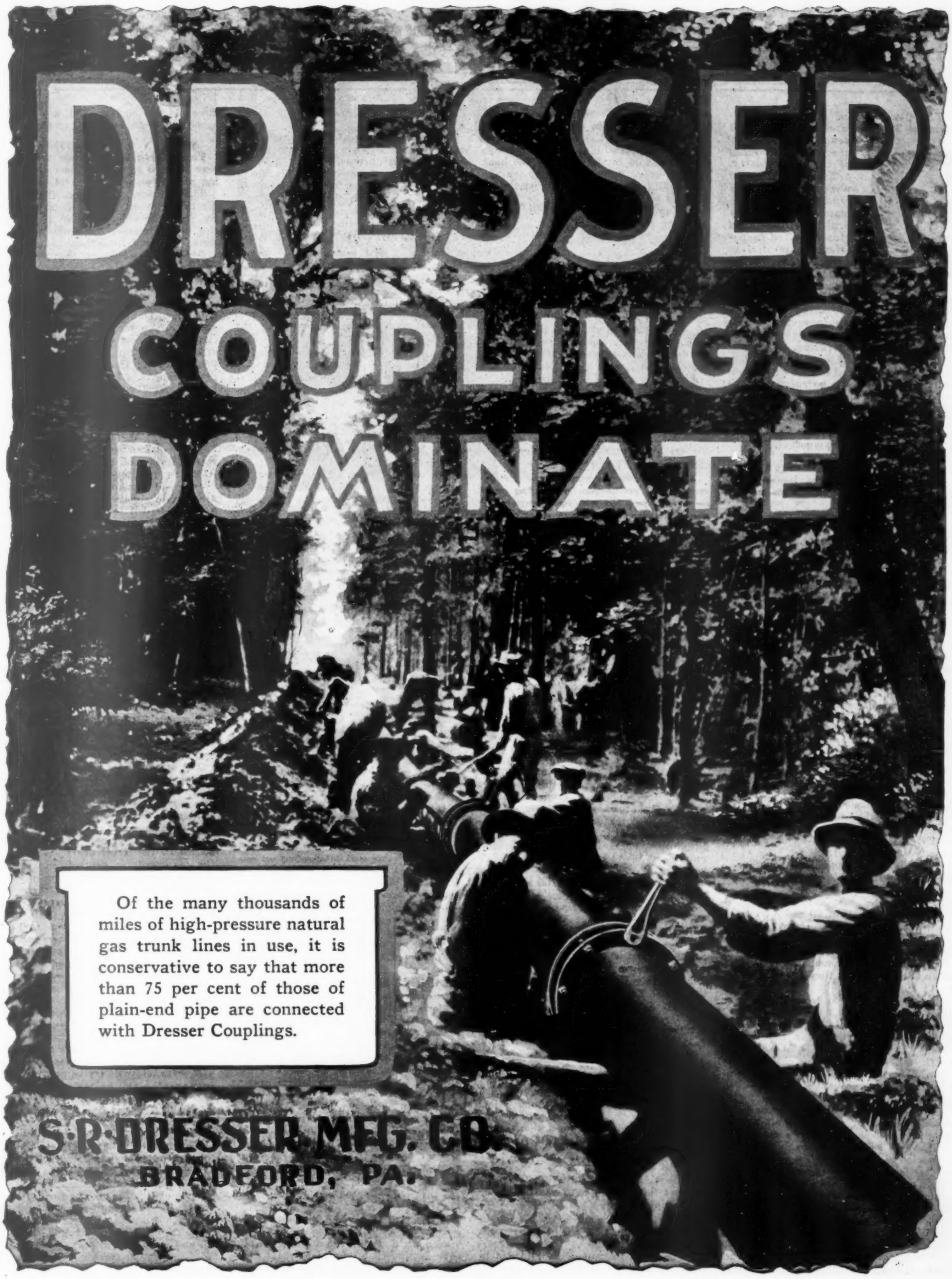
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# Technical Questions Answered

By CHARLES K. FRANCIS, PH.D., TECHNICAL EDITOR

*The Question and Answer Department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry.*

*Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation.*

*Those connected with the marketing departments and others interested in the utilization of petroleum products are also invited to take advantage of the new service.*

*Questions should be submitted in as much detail as possible so as to assure a satisfactory answer.*

### BLENDING FOR GRAVITY

**Calculations for mixing liquids to a definite gravity. Continued from the last issue.**

Barrels Formula. The quantities and gravities are set down in the form of an equation.

$$\frac{(\text{Bbls.} \times \text{grav.}) + (\text{Bbls.} \times \text{grav.})}{\text{Total Bbls.}} = \text{Grav. Mix.}$$

Example Light Liquids, What will be the gravity when 200 bbls. each of 50 and 60 gravity product are mixed?

$$\frac{(200 \times 50) + (200 \times 60)}{400} = \text{Gravity } 55$$

Rectangle Method. Draw a rectangle and set down in the left-hand corners the given gravities or percentages of the two liquids. In the center place the gravity or percentage desired. Place the difference between the desired number and the two given numbers in the opposite right-hand corners at the ends of the corresponding diagonals. The results thus obtained show the relative number of parts of the given numbers which lie on the corresponding horizontal lines of the rectangle to be used when making the mixture. State in terms of specific gravity for accurate calculations.

Example Light Liquids. What proportion of 60 A.P.I. gasoline should be added to 52 naphtha to make a blend having a gravity of 57 A. P. I.?

Following the directions we have

| | | |
|---|---|---|
| 60 | | 5 |
| | 57 | |
| 52 | | 3 |

Therefore 5 parts of 60 and 3 parts of 52 will give the desired product.

### STANDARDIZING HYDROMETERS

**How can we test our hydrometers so as to satisfy us that they are correct?—C. C. T.**

It is a good plan to have your laboratory supplied with a complete set of hydrometers which have been examined and certified as to accuracy by the United States Bureau of Standards, Washington, D. C. These will serve for checking the instruments which are in use. The certified instrument should not be used in routine work.

A direct method is to determine the specific gravity of a series of oil by the weighing method. The series should extend over a sufficient range to cover the hydrometers which are to be checked. A special flask with a construction in the neck on which is a mark to indicate the containing volume should be prepared, dried and weighed at 60 degrees Fahrenheit. The flask is filled with distilled water to slightly above the containing mark and then immersed in a water bath at a temperature of 60 degrees for one hour. Quickly dry the flask with absorbent cloth, remove the excess liquid so that the level will be opposite the mark on the neck and weigh. Now clean and dry the flask, fill with oil to slightly above the mark, hold in the bath for one hour at 60 degrees Fahrenheit. Remove the excess oil and quickly dry the flask with cloth as before, then weigh.

The calculation is illustrated by the following example:

| | |
|---|---|
| Flask and water weigh | 635.98 grams |
| Flask alone weighs | 137.06 |
| Weight of water | 498.92 |
| Flask and oil weigh | 560.32 |
| Flask alone weighs | 137.06 |
| Weight of oil | 423.26 |

Wt. of oil 423.26 / Wt. of water 498.92 = Specific grav. oil .8483

Convert this figure to A.P.I. degrees by use of the standard tables. Certain corrections should be made for very exact work but this method will serve for all ordinary purposes.

This example and further details concerning the procedure may be found on page 620, Handbook of the Petroleum Industry, by Day.

### OIL RECOVERY BY WATER FLOODING

**How extensive is the method for increasing oil production by flooding practiced? If possible will you mention the names of any books which describe this method?—P. A. H.**

There are no reports available which show where and the area in which this method is being used. It appears to have originated in Pennsylvania and is used more there than in any other district.

The following is from Petroleum Development and Technology, published by the American Institute of Mining and Metallurgical Engineers:

Water flooding in the Bradford and Bolivar Fields of Pennsylvania and New York is yielding about twice as much oil as has been produced by natural methods. It consists in delivering fresh water to the oil sand in a central well and gaining increased production from adjoining wells. Water flooding has been practiced for about 30 years and the operating technique has been well established. Its success seems to hinge on capillary phenomena working within the sand, thus limiting its application to fields having similar sand texture. The low drilling cost and the high price of the crude are important considerations in its success at Bradford. There is still room for improvement in technique and there are legal questions which must be settled.

Some of the more important publications are:

C. A. Ashburner; Report R. Second Geological Survey Pennsylvania, 1880.

J. O. Lewis; Methods for Increasing the Recovery from Oil Sands, United States Bureau of Mines, Bull. 148, 1917.

R. B. Bossler; Oil Fields Rejuvenated, Pennsylvania Bureau of Topography and Geological Survey, 1922.

G. H. Ashley and J. F. Robinson; Oil and Gas Fields of Pennsylvania, Pennsylvania Geological Survey, fourth series, 1922.

D. H. Newland; Mineral Resources of the State of New York, New York State Museum, Bulletins 223, 224.

David White and A. F. Melcher; Much Oil Remains in Bradford Sand After Flooding Process. Paper before the Northwest Producers Association. Also found in the Oil City Derrick, April 20, 1925.

### A VARIETY OF BAUXITE

**What information have you about the mineral diaspore?—F. H.**

This is a clay material consisting of hydrated alumina. When heated it pops and breaks into scales. It is of importance as a constituent of bauxite and in a particular kind of bauxite, known as diasporite, it constitutes the bulk of the material.

It has some value for decolorizing oil but most bauxites are inferior to fullers earth for this purpose. It is one of the important ores of aluminum and furnishes the raw material for the manufacture of chemical compounds of the aluminum group.

### COMPOSITION OF NATURAL GAS

**Why is it that propane is mentioned as an objectionable substance in natural gas? You said (April 22, 1925) that a gas having a gravity of 0.56 was pure methane and I should like to ask if there is a rule which may be used for estimating the composition of gas from the gravity?—E. G. C.**

You probably have reference to the fact that propane boils at such a low temperature, about 48 degrees Fahrenheit, that even if it should be extracted from the gas it could not be held in the gasoline and therefore the weathering loss would be very high. Propane has a high heat value of 2,500, so this fact makes it a desirable constituent from this standpoint.

There is no rule for determining the composition of natural gas simply on the information that a statement of gravity furnishes. Methane is the lowest member in the hydrocarbon series and has a gravity, on the basis of air, of 0.554, so it is self evident that if the gravity is correct, a gas with a gravity of 0.56 must be practically pure methane. Knowing the composition of a gas it is a simple matter to calculate its gravity.

The normal hydrocarbons present in natural gas, with their gravities, follow:

| | |
|---|---|
| Methane | 0.554 |
| Ethane | 1.038 |
| Propane | 1.523 |
| Butane | 2.007 |
| Pentane | 2.491 |
| Hexane | 2.975 |
| Heptane | 3.459 |
| Octane | 3.944 |

Pentane, hexane and heptane are the usual compounds present in the gasoline obtained from natural gas.

### CRACKING OF LUBRICATING OIL IN THE MOTOR

**Is the carbon which is deposited in the automobile cylinders due to the cracking of the lubricating oil or to the cracking of the gasoline?—L. P. A.**

An answer to this question must to a great extent be based on personal opinion, on the condition of the car and the kind of gasoline and lubricating oil used in it.

As both products contain carbon there must be some residue of carbon unless there is complete conversion to gas, carbon dioxide and water. We are certain that under ordinary conditions this ideal result is not obtained and that free carbon is one of the products of the combustion.

Dr. C. E. Waters of the United States Bureau of Standards has studied the behavior of lubricating oils and is of the opinion that the formation of the carbon in the cylinders is caused by oxidation and subsequent polymerization. If there is any cracking it must occur to a very limited extent. When an oil is carbonized in the laboratory, a brown coating is formed on the walls of the flask and there is no regularity in the quantity of varnish or gum formed. The carbonization number of an oil is independent of the flash and fire, also of the evaporation loss on heating.

While there are some conditions existing in the automobile cylinder which are favorable to cracking it is also true that there are unfavorable conditions, too. The presence of air and traces of water constitute very unfavorable conditions for cracking. So with the information we have at this time it appears that oxidation and direct decomposition of the gasoline and the lubricating oil are the chief agencies for the formation of the carbon.

### ACID IN LUBRICATING OIL

**Please describe a simple test which may be used by our engineer when testing a lubricating oil for acid.—F. G. B.**

The practice you suggest, that is having the engineer do work of this character, has some objections and may be setting up a condition which you would not wish to extend throughout your organization. If you have no chemist in your employ, you will be much better pleased with the results you will obtain from a reliable consulting laboratory.

The presence of acid may be detected from a water wash of the oil. Shake about half an ounce of the oil with four times the volume of distilled water and after settling, test this water with blue litmus paper. If a pink shade appears, the oil is acid. As lubricating oil should be free from sulphuric acid, sometimes left in the oil through faulty treating, it should be looked for when acid is indicated by the litmus paper test. To do this some of the water wash should be heated and four or five drops of a saturated solution of barium chloride added. A white precipitate may indicate the presence of sulphuric acid, but as there are certain conditions to be observed, if a white deposit is formed it will be advisable to have a chemist examine it before being positive.

### PORTABLE GASOLINE PLANT

**We have purchased a property which is producing 2,000,000 feet of gas and want to know if a portable gasoline plant would be the best form of a plant to build in this district?—T. N. H.**

This question comes from an oil district in which there are known to be several gasoline plants. A similar question has been submitted from a distant field where there appears to be large quantities of gas available (L. M.) so the two questions may be answered together.

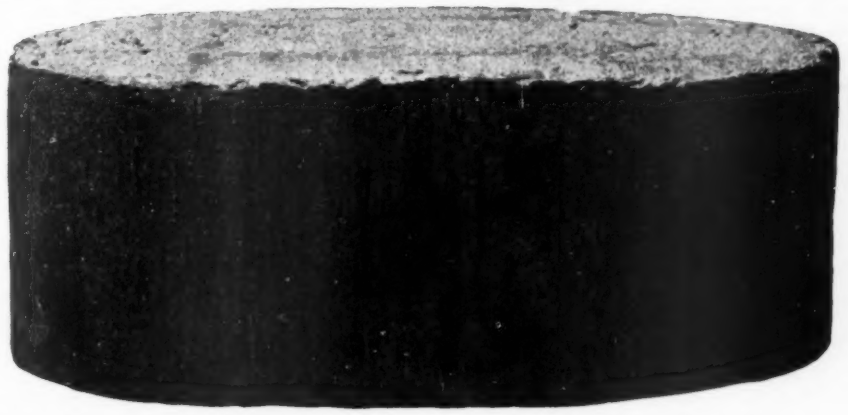
The first step to be taken should include an accurate determination of the gasoline content in addition to the pressure and volume.

The original idea of the portable gasoline plant was to have on hand apparatus which could be conveniently rushed to a new pool so that waste would be prevented and the gasoline extracted while a larger permanent plant was being constructed. A plant of this kind has been needed by the larger operators but when the gas supply is assured, and the preliminary investigations have shown a profitable condition to exist, there is no reason why a properly designed portable plant should not be used.

The bringing in of a new well in a new area may mean that there will be a large gas output but the opposite condition may develop. In place of waiting for positive indications of a permanent gas supply, the operator may move in the portable equipment when sufficient gas is obtained for commercial operation. The first wells usually have the largest gas volumes. The gas flow per well decreases with the bringing in of additional wells. Due to this condition the temporary plant will serve as auxiliary equipment to the permanent plant in taking care of the peak production until such time when it is no longer needed and may then be moved to another location.

The cost of a portable plant varies from $12,000 up. The equipment may be handled in about three truck loads. A plant recently installed handles 2,500,000 feet of gas at 40 pounds pressure. Exclusive of steam supply and gathering lines, a portable unit may be put into operation within one to three days after the material is on the ground. See The Oil and Gas Journal, May 27, 1926, page 128, for a descriptive article on this subject.

# The new fuel refineries can produce



*Actual size of Fernholtz Oil-Coke Briquette.*

WHEN modern cracking processes were introduced little thought was given to the waste residue. Appreciating the very high B.T.U. value of *oil-coke residue*, and anticipating the universal adoption of cracking processes, Fernholtz Engineers several years ago began the study of ways and means to convert this waste into added profit. The result has been the perfection of the Fernholtz Briquetting Process.

Fernholtz Briquettes embody many advantages over highest type coal. They have the highest fuel value, very small ash content (1.5%), no clinkers; the briquettes are uniform in size, compact and hard. No binder is required. The briquettes will not absorb moisture; neither will they distintegrate in open storage. They burn with no smoke; no stoking is required and each briquette remains firm while burning. This fuel is unquestionably the finest for both domestic and industrial consumption and should command prices much higher than coal or other fuel.

**Comparative Fuel Values**

Bituminous Coal—B.T.U. —10,500 to 11,500

Anthracite Coal—B.T.U. —13,500 to 14,500

*Oil-coke residue*—B.T.U. —15,000 to 15,500

*The Fernholtz Process is adaptable to every refinery where a modern cracking process is used. We shall be pleased to give you full information. Ask for Book of Facts.*

PORTER & COMPANY, Inc.

*Briquetting Engineers*

629 South Spring St., Los Angeles, Calif.

# Fernholtz Briquetting Process

DERIVING MAXIMUM EFFICIENCY FROM MODERN OIL REFINING

# Panhandle Wells Averaging 284 Bbls.

## Tonkawa Extended a Mile Northwest by 2,400-Bbl. Well of The Texas Company. New Coastal Dome Reported

The 163 wells in the Texas Panhandle are producing an average of 284 bbls. per well. Clark & Baldridge's well in the Pampa district of Gray County, flowed 700 bbls. the first 24 hours and then quit. Following the Wilcox-Pampa well the area is to be made the scene of a lively drilling campaign. In Hutchinson County, the Westex Co. carried off the honors of the week with two wells, one 1,674 bbls. and the other 1,750 bbls.

In Oklahoma, Tonkawa was extended a mile northwest by the completion of The Texas Company's No. 2 Silver, which started flowing 100 bbls. an hour. The Kewanee well at Bixby was making 120 bbls. an hour at last reports. The Kellyville Field in Creek County, is drawing notice, two wells deepened making 2,000 bbls.

A supposed new dome on the line of Liberty and Chambers Counties is reported from the Gulf Coast. In north Texas, Shackelford and Montague Counties made new production records, the Cook Ranch Pool helping send Shackelford to 10,865 bbls.

In California, all the producers completed at Long Beach extension were from the deep sand. Nine more tests are planned.

### Oklahoma

The Tonkawa deep sand was extended a half mile northwest by the completion of The Texas Company's well making 2,400 bbls. The Kewanee Oil & Gas Co.'s Bixby well was making 120 bbls. an hour with some salt water showing. The Kellyville Field in Creek County reported two wells deepened making 2,000 bbls. each. The Magnolia's No. 4 Davis, Seminole County, was flowing 70 bbls. an hour and not yet completed. Barnsdall got a 680-bbl. well in Okfuskee County.

### Kansas

A showing of free oil in a wildcat in McPherson County, which has not heretofore had commercial oil was the feature of the week in Kansas. The Manhattan Oil Co. and Phillips Petroleum Co.'s No. 1 Freeman, in Greenwood County, is a 450-bbl. well.

### Kentucky-Tennessee

A 50-bbl. well in the Hueyville Field, Floyd-Knott Counties, hitherto regarded as a gas area, was the novelty in Kentucky. The Swope Pool produced the largest well in the Owensboro district for the week. The Dunville, Casey County, wildcat may open a new area.

### Central West

The 225-bbl. completion in the Allendale Field, Wabash County, Illinois, has revived interest in that field and renewed plans for operations. There were 25 completions for the week in the Central West with 526 bbls. production, 7 dry holes and 3 gas wells.

### Michigan

The Saginaw Prospecting Co.'s No. 1 Palvaz farm, in the Saginaw Field, shot with 20 quarts, filled up 140 feet. It will make a 10-bbl. well.

### North Texas

Shackelford and Montague Counties reached a new production peak, Shackelford through the output of the Cook Ranch touching 10,865 bbls. and Montague County 3,979 bbls. Atlantic Producing Co. completed a well flowing and swabbing 430 bbls. in the Rachuig Pool of Young County. The Prairie Oil & Gas Co. well in the Cross Cut area of Brown County, is looking better.

### Texas Panhandle

Clark and Baldridge's well in Gray County, a mile west and a half-mile north of the Wilcox-Pampa well, flowed 700 bbls. but stopped at the end of the first day. It has stimulated leasing in that district and a drilling campaign is promised in the Pampa district. The Panhandle production is conservatively estimated at 46,353 bbls. The Westex Co. had the best showing of the week, No. 2 Whittenburg, making 1,674 bbls. and No. 3 Whittenburg, 1,750 bbls.

### Louisiana-Arkansas

Hopes of opening a new pool in Louisiana or Arkansas were disappointed during the week as wildcat test after test failed to find production in the horizon expected. One of these was along the Angelina-Caldwell flexure from which so much has been anticipated, but drilling operations are being extended and lease trading is still brisk. Urania was quiet and Lisbon output is declining.

### California

Deep drilling in the Long Beach Field accounted for all the completions there, the largest being 786 bbls. and all fairly good producers. An even dozen deep wells have been completed, all but one handicapped by mechanical trouble showing favorable initial output. Preparations are being made to deepen nine more upper sand producers. Inglewood is expected to stay around 50,000 bbls. for the next 60 days. Work is going on slowly in the town lot area of Huntington Beach, but it is feared it will break loose. Several wells are expected in at Ventura shortly.

### Rocky Mountain Area

Midwest Refining Co. got a 5,000-bbl. well in the first Wall Creek sand at Salt Creek but it is thought likely to be a freak. A wildcat drilling at Crooks Gap in the Ferris Mountains may open a new territory. Sunburst production is being limited by storage and proration continues. The Homestake company brought in the largest well of the week, 2,000 bbls., in the Ellis sand. Cat Creek Field is gradually dropping. Northern New Mexico is due for a play. Pennsylvania operators especially being active. In Utah nothing definite is yet reported in the Cane Creek area.

### Gulf Coast

The most interesting item in the Gulf Coast is the supposed new dome on the line of Liberty and Chambers Counties, 10 miles south of the South Liberty Pool and the same distance east of Barber Hill. Increasing percentages of salt water are reported from Spindletop. Nine deep tests are starting or drilling off the old dome. The region around Lufkin, Angelina County, is arousing interest. It is in east Texas and supposedly outside the saline dome country.

### Southwest Texas

Cin-Tex Petroleum Co.'s No. 7 Benavides in the Cole Field of Duval County came in flowing 35 bbls. an hour. It is a southwest offset to No. 6 which later increased its production to 400 bbls. while No. 7 dropped to 350 bbls. They are the best wells in that district, flowing a steady stream with no showing of gas, while all others have made gas and sprayed oil except on the east side where they were put on the pump.

Six wells completed in the Aviator extension of the Bruni tracts last week added 2,325 bbls. flush production to the field. Four wells in the Mirando Field have added 130,000,000 feet of gas. Associated's Bruni extension failed.

The Simms Co. wildcat on the Dinn ranch, Duval County, 5 miles north of the Cole Field, although not completed, is estimated likely to make a 20,000,000-foot gas well.

### Canada

Irma Oil Development Co.'s well in the Irma-Wainwright Field east of Edmonton is to be deepened for a conclusive test of the lower horizon. It got fair commercial gas production at 1,025 feet. There is no interruption in the rapid and widespread extension of drilling in the provinces, or the entrance of new companies into the field.

### Pennsylvania-West Virginia

Development work is largely confined to drilling in the old territory where light wells are the best to be expected. Clay County and Ritchie County, West Virginia, continue to be active. The gas companies are busy in the lower counties of West Virginia since the completion of the Hope Natural Gas Co.'s line.

In Holmes County, Ohio, the Empire Gas & Fuel Co. got a 140-bbl. completion in the Clinton sand. It also got a 65-bbl. well in Licking County. The shallow sand produced nothing better than light pumpers.

### New Mexico

The west side of the Artesia Field is now getting most attention due to recent good completions there. The Maljamar company's No. 1 Baish picked up a new pay encountered below the green shale at 3,998 feet. The new production is light green and resembles the north Texas crude and is of the same gravity as the Artesia oil and free from sulphur content.

### Mexico

Forty-five wells were completed in Mexican fields in the past 10 days, 16 being producers, making 52,375 bbls. Three of them were in the south field, accounting for 45,400 bbls. There were two failures in the south field, one of the Cortez corporation being one of the few important wildcats yet on the drilling list.

### Venezuela

Venezuela Oil Concessions through recent completions and increased efficiency is probably producing 30,000 bbls. daily. Lago's production at last report was coming back around 14,000 bbls. Gulf company's output is holding around 14,500 bbls.

# Late News From the Fields

### OKLAHOMA

The Reiter-Foster Oil Corp.'s wildcat test in the SW cor. Section 4-19-1w, northwestern Payne County, has been making a promising showing in the past week. Sand was found at 4,575 feet and has been drilled in only 6 feet and the well was shut down to await the arrival of 5-inch casing. The hole filled with oil, but in the course of the past week it has made several flows, one of 75 bbls. After each flow the hole filled with oil The company has a block of acreage there. The test is about 20 miles southeast of the Garber Field in Noble County and over 30 miles northwest of the Yale-Ingalls Field in Payne County.

The Sinclair Oil & Gas Co. and Marland Refining Co.'s No. 1 Warrior, C NW NW NW, Section 17-9-7, Seminole County, has a showing of oil and gas at 4,042 feet. The crew was pulling the big pipe.

The Davenport, Lincoln County, Pool last week averaged 10,337 bbls. a day; Stroud, in the same county, 2,222 bbls.; Skellyville, 3,710 bbls. All are in Lincoln County. Deep Rock, Payne County, averaged 3,591 bbls.

Amerada Petroleum Corp., Wood Brothers and Morgan & Flynn's No. 1 Steil, NW cor. SW, Section 18-10-11, Okfuskee County, was shot with 60 quarts in sand at 3,541-62 feet and produced 270 bbls. the first 24 hours. It is about 6 miles from any other production.

Johnson & Ash and the Atlantic Oil Producing Co.'s No. 1 Gray, C NW NW NW, Section 21-13-10, Okfuskee County, was a hole full of water and abandoned at 3,640 feet.

The Gypsy Oil Co.'s No. 24 Seya, SE cor. NW, Section 33-6s-5w, Jefferson County, is a 180-bbl. well and No. 25 Seay, SW cor. NE, Section 33, is a 75-bbl. well in the 1,300-foot sand.

W. R. Ramsey's No. 5 Amos, C SW SE SE, Section 31-8-8, Wewoka Field, Seminole County, got sand at 4,181-92 feet and the well started at 78 bbls. an hour.

The Texas Company's No. 1 Siler, in Section 28-25-1w, Tonkawa Field, Kay County, was drilled 2 feet deeper and now is in sand at 4,280 88 feet and the production which had dropped to 60 bbls. an hour was brought up to 85 bbls. an hour. The Gypsy Oil Co. on Tuesday morning was drilling at 4,205 feet in soft black shale in its test a quarter of a mile southwest of the Texas well.

### KANSAS

Important wildcat news came out of Kansas as the week in review was closing. W. F. Hopper and others' No. 1 Baker, C NW NW NW, Section 7-26-7w, Reno County, the most closely watched of the recent crop of wildcat drilling wells in the State, got a hole full of salt water at 3,927 feet and was drilling ahead. Doctor Rood and others in their No. 1 Kumberg, C NW SE NW, Section 14-30s-12w, Barton County, had a showing of oil and gas at 3,863 feet and the crew was underreaming the 6-inch casing.

### MICHIGAN

SAGINAW, Mich., June 15.—Saginaw Prospecting Co.'s No. 1 Palvaz farm, shot with 20 quarts, filled up 140 feet, and will make 10 bbls.

### SOUTHWEST TEXAS

SAN ANTONIO, Tex., June 15.—Simms Oil Co.'s wildcat on the Dinn ranch, Survey 666, Duval County, 5 miles north of the Cole Field, had not completed bailing this morning, but it is safe to predict it will be a gas well of at least 20,000,000 feet. The same company's wildcat on Survey 143, 5 miles south of Randado, has set casing at 2,020 feet after coring an oil sand.

## FUEL OIL CONSUMED BY PUBLIC UTILITIES

A total of 659,700 barrels of fuel oil were consumed by electric public utility power plants in the United States during April, according to the monthly report of the division of power research, geological survey. This represented a decrease of 55,323 barrels, or .08 per cent, from the consumption the previous month, and a decline of 1,300 barrels, or .06 per cent, in the daily average consumption compared with April a year ago.

Consumption of coal and natural gas by these plants also showed a decrease in April from the previous month but the use of these fuels was greater than in April of 1925. Consumption of coal declined one per cent and natural gas slightly less than one per cent in April compared with a month ago but the increase over April, a year ago, was .06 per cent for coal and .04 per cent for natural gas.

XUM

# Shackelford County's Record Output

## Production Reaches 10,865 Bbls. and Montague County Touches Peak of 3,979 Bbls. Good Wells in Young County

By C. D. Lockwood
*Staff Correspondent, North Central Texas*

FORT WORTH, Tex., June 14.—New all-time production records for Shackelford and Montague Counties, an exceptionally good producer in the Rachuig Pool of Young County about 2½ miles northwest of Olney, some rather disappointing results in the new Parsons district south of Olden in Eastland County, and continued improvement in appearance of the Prairie Oil & Gas Co.'s pool-opener north of Cross Cut, in Brown County, were the few high lights of the past week in the North Central Texas fields.

Shackelford County's record production was 10,865 bbls. and resulted from recent good completions in the Cook Ranch Pool, northwest of Albany, where the Roeser & Pendleton and Marland interests completed their sixteenth producer and the nineteenth for the pool. Montague County's peak production since the first oil was found there was 3,979 bbls., an increase of 584 bbls. over the preceding week. These figures represent weekly averages and not single day production. The Humble Oil & Refining Co.'s No. 1 Maddox figured largely in the gain since it produced 1,637 bbls. in four days. The oil was still rather badly cut by gas but the Sinclair Pipe Line Co. accepted it after treatment.

### Young County Wells

The sensational oil well of Young County was the Atlantic Oil Producing Co.'s No. 4-B Rachuig, in Block 4, Rachuig land. It flowed and swabbed about 430 bbls. from sand at 1,149-54 feet and is a west offset to the well of Chenault & Lea which was brought in some time ago for about the same amount.

Barkley and others' No. 2 Earl Rogers, in Young County, was completed for 70 bbls. on the swab from sand at 866-74 feet, and No. 3, on the same lease, was swabbing at the rate of 125 bbls. daily and preparing to pump at 861-73 feet.

In the Parsons Pool, south of Olden, Eastland County, the Gulf Production Co.'s No. 2 J. D. Parsons "A" was squibbed a couple of times with light shots and flowed over the derrick but was flowing only about 75 bbls. at total depth of 1,536 feet and is to be put on the pump. No. 4 Parsons "A" flowed and swabbed 20 bbls. at 1,228 feet with about 200,000 feet of gas; No. 3 was drilling at 1,212 feet, and a location has been made for No. 5 Parsons "A", 883 feet north and 150 feet east of SW cor. Lot 53, League 3 and 4, McLennan County school land. The Gulf Production Co. is also drilling No. 1 J. D. Parsons at 580 feet.

The Prairie Oil & Gas Co. has completed the standard rig over No. 1 Trammel, Brown County wildcat which opened a new pool near the Eastland County line north of Cross Cut and then caught fire. On Tuesday of last week this well made 268 bbls. with the tools and cable still in the hole; on Wednesday the flow was 372 bbls., and late in the week it was doing better than 400 bbls. The Fagg well, northeast of the Prairie producer, is still in a condition of uncertainty. Attempts to pump it last week were unsuccesful and it is awaiting additional equipment.

### Cook Ranch Pool

Another good producer was added to the Cook Ranch Pool in Shackelford County during the week, when Roeser & Pendleton and the Marland Oil Co.'s No. A-2-84 was brought in. It flowed 30 bbls. an hour initially from sand at 1,338-60 feet. Roeser & Pendleton's No. B-1-84, at the age of 10 days on Monday of this week, was still flowing 613 bbls. Its intial output was 710 bbls. from sand at 1,336-61 feet.

Several rumors concerning this pool have been afloat during the past week to the effect that the Magnolia Petroleum Co. was trying to buy out the Roeser & Pendleton interest and also that the Marland Oil Co. had offered something like $1,500,000 for that same interest. Then there were some reports from the field by company scouts that water was appearing in some of the wells, varying from 1 to 15 per cent. Mr. Roeser told this writer on Monday morning, however, that any report of serious water encroachment was unfounded. No. A-12-85, he said, was drilled too far into the sand and had to be plugged back a little, which was accomplished successfully, and the discovery well's oil has to be treated because of faulty casing but there is no water trouble in the sense of endangering production. Output of the joint interest A lease, in Section 85, was 885 bbls. Monday morning; A-84 was 1,406 bbls.; Roeser & Pendleton's "B" lease, in Section 84, was 613 bbls. and their "B" lease in Section 85 was 2,635 bbls. The Humble's production was not available.

The Humble Oil & Refining Co. is planning to lay a 6-inch line into the pool from Fambrough Station, in Stephens County, about 40 miles away. It now costs the Humble 46 cents a barrel to haul the Cook Ranch oil to its tank farm.

The gasoline plant which Roeser & Pendleton are building in the Cook Ranch Pool will have a capacity of 4,000,000 feet of gas daily and will be ready for operation about August 1.

Roeser & Pendleton are going to lay a 6-inch water line about 12 miles in length from the Clear Fork of the Brazos River to the pool and to the town of Albany. This will be a godsend to Albany as the town's water supply is in bad shape. There is a $25 fine for anyone caught washing a car in Albany, according to some of the Shackelford oil men, because of the water shortage.

### Other Operations

In Jack County, the Baytex Oil Co.'s No. 3 Snedeker was shot with 5 and 8 quarts and was estimated good for about 35 bbls. Guthrie and others' No. 1 Snedeker had a hole full of oil and was slopping over from sand at 781-88 feet. These wells are offsets to the discovery in the Antelope Field.

In Upton County, the Independent Oil & Gas Co.'s No. 1 Emma Wooley topped the salt at 440 feet. The Eastland Oil Co. and others' No. 1 E. S. Hughes was drilling at 2,015 feet in anhydryte. The Dixie Oil Co.'s No. 3 Burleson was tubed with packer and at latest reports had increased to 86 bbls.

In Ector County, J. S. Cosden's No. 1 "B" W. E. Connell topped the salt at 1,000 feet, 43 feet lower than in No. 1 Connell, 6 miles southeast. Skinner and others' No. 1 J. W. Buchanan was spudding, and the Exploration Co.'s No. 1 Kloh & Rumsey was spudding.

In Crane County, The Texas Company's No. 1-F, Section 21, was drilling at 2,310 feet in hard lime.

In Crockett County, Bill Shaffer and others' No. 1 University was shut down at 2,165 feet to work out geology on their block. The well had a showing of oil, about half a bailer, at 2,135-65 feet. The Pure Oil Co. purchased the east half of the NW and W half SW of Section 3 and the south 160 acres of Section 7, Block 47, University land, as protection against this well, paying $15 an acre.

In Crane County, J. S. Cosden's No. 1 Connell was drilling at 3,350 feet in anhydrite.

In Wichita County, the E. J. Stump Oil Co.'s No. 1 Chilson, Block 6, had oil sand at 1,801-02 feet and was swabbing to test.

**PRODUCTION BY FIELDS**
**For Week Ending June 7, 1926**

**Electra**

| | |
|---|---|
| Atlantic Oil Prod. Co. | 56 |
| Empire Gas & Fuel Co. | 658 |
| Gulf Prod. Co. | 1,033 |
| Humble O. & R. Co. | 148 |
| Magnolia Pet. Co. | 3,425 |
| Panhandle Ref. Co. | 48 |
| Phillips Petroleum Co. | 17 |
| Prairie O. & G. Co. | 110 |
| Rio Bravo Oil Co. | 600 |
| The Texas Company | 3,503 |
| Texhoma Oil Ref. Co. | 1,334 |
| Miscellaneous | 5,805 |
| Total | 16,737 |

**Burkburnett**

| | |
|---|---|
| Gulf Prod. Co. | 434 |
| Humble O. & R. Co. | 433 |
| Magnolia Pet. Co. | 2,620 |
| Panhandle Ref. Co. | 242 |
| Prairie O. & G. Co. | 30 |
| Sinclair O. & G. Co. | 56 |
| Skelly Oil Co. | 200 |
| Sun Oil Co. | 53 |
| The Texas Company | 339 |
| Texhoma O. & R. Co. | 565 |
| Miscellaneous | 7,315 |
| Total | 12,287 |

**Iowa Park**

| | |
|---|---|
| Atlantic Oil Prod. Co. | 72 |
| Gulf Prod. Co. | 138 |
| Humble O. & R. Co. | 158 |
| Magnolia Pet. Co. | 375 |
| Panhandle Ref. Co. | 30 |
| Roxana Pet. Corp. | 10 |
| Simms Oil Co. | 10 |
| The Texas Company | 218 |
| Texhoma Oil & Ref. Co. | 382 |
| Miscellaneous | 2,843 |
| Total | 4,236 |

**Wilbarger**

| | |
|---|---|
| Atlantic Oil Prod. Co. | 114 |
| Empire Gas & Fuel Co. | 956 |
| Gulf Prod. Co. | 35 |
| Humble O. & R. Co. | 3,585 |
| Phillips Pet. Co. | 4,632 |
| Prairie O. & G. Co. | 118 |
| Roxana Pet. Corp. | 417 |
| The Texas Company | 31 |
| Texhoma Oil & Ref. Co. | 73 |
| Miscellaneous | 4,105 |
| Total | 14,066 |

**Archer**

| | |
|---|---|
| Atlantic Oil Prod. Co. | 286 |
| Barnsdall Oil Co. | 1,178 |
| Cosden Co. | 720 |
| Empire G. & F. Co. | 558 |
| Gulf Prod. Co. | 3,135 |
| Humble O. & R. Co. | 1,539 |
| Independent O. & G. Co. | 18 |
| Magnolia Pet. Co. | 1,460 |
| Marland Oil Co. | 418 |
| Panhandle Ref. Co. | 130 |
| Phillips Pet. Co. | 622 |
| Prairie O. & G. Co. | 2,282 |
| Roxana Pet. Corp. | 350 |
| Simms Oil Co. | 524 |
| Sun Oil Co. | 360 |
| The Texas Company | 3,079 |
| Texhoma O. & R. Co. | 3,134 |
| Tidal Oil Co. | 30 |
| Miscellaneous | 12,989 |
| Total | 32,812 |

**Young**

| | |
|---|---|
| Atlantic Oil Prod. Co. | 267 |
| J. S. Cosden | 91 |
| Gulf Prod. Co. | 266 |
| Humble O. & R. Co. | 330 |
| Magnolia Pet. Co. | 270 |
| Marland Oil Co. | 1 |
| Mid-Kansas O. & G. Co. | 10 |

# GRAY COUNTY, PANHANDLE, WELL PROVES UP PAMPA PRODUCING AREA

By C. D. Lockwood

FORT WORTH, Tex., June 14.—Gray County again held the spotlight in the Texas Panhandle when the Clark & Baldridge well No. 1 Merten in the C NW, Section 82, Block 3, about 1 mile west and 1½ miles north of the sensational Wilcox-Pampa Oil Co.'s No. 3 Worley & Reynolds was shot during the past week and made 700 bbls. the first 24 hours although it stopped flowing at the end of the first day. This well proved a great stimulus to lease trading in the vicinity and the Phillips Petroleum Co. was reported to have bought the west half of the northeast quarter of Section 82 from W. B. Saulsbury for $50,000 in cash, an equal amount of oil and a 1/32 overriding royalty. The shot given this well was 240 quarts placed at 3,090 to 3,165 feet in granite wash. Although the life of this producer as a flowing well was short, it evidently proves up considerable territory for good production and a drilling campaign of some magnitude for the Pampa district is already under way. The Humble Oil & Refining Co. has made two locations, for No. 1 H. H. Merten and No. 1 Worley & Reynolds, and the Wilcox-Pampa Oil Co. also staked a couple of new ones, being Nos. 5 and 6 Worley & Reynolds.

Panhandle production for the past week was variously estimated by several of the large companies heavily involved in the whole area from 46,000 to 50,000 bbls., and the estimate of 46,353 bbls seems conservative enough. Some of the reasons for the increase over last week's figures are found in the performance of the Currie Brothers and Phillips' No. 1 Smith which averaged 2,400 bbls. for the week whereas it was allowed to produce only 1,000 bbls. daily the previous week, and the Lucky 10 Oil Co.'s No. 1 Smith which came in sensationally a few weeks ago but was shut in for storage and did not figure in last week's report at all, averaged 4,500 bbls. daily during the week just closed. Gray County, of course, jumped from 509 bbls. to 2,088 bbls. for the week because of the Wilcox-Pampa gusher and Wheeler County was up a little due to the deepening of the Continental Oil Co.'s No. 1 J. H. Jackson which was increased from a 25-bbl. producer to one good for about 110 bbls. daily.

A good idea of the situation in the Panhandle at present and the prospects for increased production in the early summer can be obtained from a perusal of the following resume of operations based on the current report:

**TEXAS PANHANDLE**
**Summary of Operations June 14, 1926**

| | Hutchinson | Carson | Moore | Gray | Misc. | Total |
|---|---|---|---|---|---|---|
| Locations | 26 | 0 | 1 | 7 | 2 | 36 |
| Rigs, building, RU | 96 | 5 | 1 | 2 | 10 | 114 |
| Drilling, above 1,000 feet | 87 | 6 | 4 | 0 | 1 | 98 |
| Drilling, 1,000-2,000 feet | 24 | 6 | 0 | 0 | 1 | 31 |
| Drilling, 2,000-2,500 feet | 15 | 4 | 1 | 2 | 2 | 24 |
| Drilling, below 2,500 feet | 34 | 5 | 0 | 0 | 1 | 40 |
| Shut down for shot | 5 | 0 | 0 | 1 | 0 | 6 |
| Shut down, other reasons | 16 | 2 | 2 | 0 | 1 | 21 |
| Fishing | 17 | 0 | 0 | 1 | 0 | 18 |
| Making oil, cleaning out, etc., not completed | 12 | 1 | 0 | 0 | 0 | 13 |
| Completed this week | 14 | 2 | 0 | 2 | 1 | 19 |
| Total | 346 | 31 | 9 | 15 | 19 | 420 |

While opinions differ widely on the ultimate peak of production, it is evident that within a few weeks some kind of a radical change is bound to occur and if

(Continued on Page 176)

| | |
|---|---|
| Panhandle Ref. Co. | 150 |
| Phillips Pet. Co. | 25 |
| Prairie O. & G. Co. | 10 |
| Roxana Pet. Corp. | 139 |
| Simms Oil Co. | 771 |
| Skelly Oil Co. | 342 |
| Sun Oil Co. | 62 |
| The Texas Company | 466 |
| Texhoma O. & R. Co. | 293 |
| Tidal Oil Co. | 145 |
| Miscellaneous | 3,495 |
| Total | 7,133 |

**Stephens**

| | |
|---|---|
| Arkansas Fuel Oil Co. | 25 |
| Empire Gas & Fuel Co. | 25 |
| Gulf Prod. Co. | 1,276 |
| Humble O. & R. Co. | 665 |
| Magnolia Pet. Co. | 380 |
| Mid-Kansas O. & G. Co. | 1,580 |
| Phillips Pet. Co. | 365 |
| Prairie O. & G. Co. | 825 |
| Republic Prod. Co. | 130 |
| Roxana Pet. Corp. | 50 |
| Simms Oil Co. | 25 |
| Sinclair O. & G. Co. | 75 |
| Sun Oil Co. | 145 |
| The Texas Company | 1,040 |
| Texas Pacific C. & O. Co. | 1,150 |
| Transcontinental Oil Co. | 3 |
| Miscellaneous | 4,785 |
| Total | 12,534 |

**Shackelford**

| | |
|---|---|
| Empire Gas & Fuel Co. | 25 |
| Humble O. & G. Co. | 900 |
| Magnolia Pet. Co. | 45 |
| Phillips Pet. Co. | 685 |
| Prairie O. & G. Co. | 10 |
| The Texas Company | 200 |
| Texhoma O. & R. Co. | 70 |
| Miscellaneous | 8,585 |
| Total | 10,520 |

**Ranger**

| | |
|---|---|
| Arkansas Fuel Oil Co. | 5 |
| Gulf Prod. Co. | 468 |
| Humble O. & R. Co. | 60 |
| Magnolia Pet. Co. | 675 |
| Mid-Kansas O. & G. Co. | 130 |
| Panhandle Ref. Co. | 125 |
| Phillips Pet. Co. | 5 |
| Prairie O. & G. Co. | 570 |
| Republic Prod. Co. | 50 |
| Simms Oil Co. | 30 |
| Sinclair O. & G. Co. | 325 |
| The Texas Company | 145 |
| Texas Pacific C. & O. Co. | 780 |
| Transcontinental Oil Co. | 25 |
| Miscellaneous | 2,390 |
| Total | 5,783 |

**Eastland-Comanche**

| | |
|---|---|
| Empire Gas & Fuel Co. | 10 |
| Humble O. & R. Co. | 75 |
| Magnolia Pet. Co. | 660 |
| Mid-Kansas O. & G. Co. | 140 |
| Phillips Petroleum Co. | 40 |
| Prairie O. & G. Co. | 70 |
| Sinclair O. & G. Co. | 20 |
| Skelly Oil Co. | 125 |
| The Texas Company | 105 |
| Transcontinental Oil Co. | 25 |
| Miscellaneous | 715 |
| Total | 1,985 |

**Brown**

| | |
|---|---|
| Cosden Co. | 550 |
| Humble O. & R. Co. | 325 |
| Phillips Pet. Co. | 40 |
| Prairie O. & G. Co. | 775 |
| Simms Oil Co. | 40 |
| The Texas Company | 575 |
| Witherspoon Oil Co. | 25 |
| Miscellaneous | 4,885 |
| Total | 7,215 |

**Callahan**

| | |
|---|---|
| Humble O. & R. Co. | 10 |
| Prairie O. & G. Co. | 240 |
| The Texas Company | 175 |
| Texas Pacific C. & O. Co. | 25 |
| Miscellaneous | 3,085 |
| Total | 3,535 |

**Miscellaneous Pools**

| | |
|---|---|
| Reagan County | 32,031 |
| Clay County | 527 |
| Montague County | 3,451 |
| Jack County | 125 |
| Throckmorton County | 690 |
| Baylor County | 151 |
| Palo Pinto County | 501 |
| Coleman County | 1,910 |
| Scurry County | 54 |
| Mitchell County | 3,577 |
| Crockett County | 939 |
| Upton County | 561 |
| Howard County | 77 |
| Crane County | 70 |
| Total | 44,664 |

**Panhandle**

| | |
|---|---|
| Carson County | 2,782 |
| Hutchinson County | 34,811 |
| Wheeler County | 82 |
| Gray County | 509 |
| Total | 38,184 |
| Total North Texas | 211,691 |

**Wichita County Completions**

Tenbrink & Rowe's No. 1 Bryan was dry and abandoned at 1,796 feet. Apple & Brandeberry's No. 6 Jennings "B" made 7 bbls. of oil and 6 bbls. of water on the pump from sand at 822-44 feet. Bullington, Lee & Pendleton's No. 1 Jennings "B" pumped 76 bbls. at 1,807-23 feet. Culberson Co.'s No. 38 Waggoner Brothers pumped 20 bbls. at 1,486-1,532 feet; No. 39 also made 15 bbls., pumping from sand at 1,485-1,524 feet. The Humble Oil & Refining Co.'s No. 4 Burnett "E" was dry and abandoned at 1,804 feet. The Petroleum Investment Co. had a 20-bbl. pumper in No. 18 Fisher at 1,562-69 feet, and the Simmons Oil Corp. had a duster at 1,968 feet in No. 1-A Fisher. Texhoma Oil & Refining Co.'s No. 18 Waggoner Brothers pumped 4 bbls. at 586-600 feet.

**Wilbarger County Completions**

The Atlantic Oil Producing Co.'s No. 4 Sigler Waggoner, Section 51, Block 2, H. & T. C. Survey, pumped 24 bbls. at 2,466-71 feet, but was not completed. Humble Oil & Refining Co.'s No. 11 Waggoner "H", Section 46, Block 4, pumped 15 bbls. at 1,888-99 feet, and 1,902-07 feet, total depth 1,908 feet. The same concern's No. 5 Waggoner "K", same section, was good for 54 bbls. pumping from 2,314-34 feet, total depth being 2,338 feet. Magnolia Petroleum Co.'s No. 53 Sumner, Section 17, Block 13, H. & T. C. Survey, was a 10-bbl. well at 1,857-68 feet. Milham Corp.'s No. 14 Waggoner "L", Section 42, Block 4, flowed 300 bbls. at 1,891-1,901 feet. Phillips Petroleum Co.'s No. 9 Waggoner "A", Section 44, pumped 260 bbls. at 1,856-81 feet; No. 12 Waggoner "A" pumped 120 bbls. at 1,844½-62 feet; No. 9 Waggoner "G" pumped 80 bbls. at 1,871-90½ feet; and No. 4 Waggoner "QQ", in Section 47, was good for 280 bbls. at 1,886-1,904 feet. J. F. Shipley's No. 1 Castleberry, pumped only 5 bbls. at 2,462-96 feet. Waggoner Refining Co.'s No. 2 Waggoner "A", in Section 47, made 295 bbls. at 1,886-1,906 feet. Winnipeg Oil Co.'s No. 1 Waggoner, in Section 48, was dry and abandoned at 2,607 feet.

**Baylor County Completions**

T. L. Head's No. 1 Stevens-A, in the Sam T. Sheffield Survey, was dry and abandoned at 1,702 feet.

**Archer County Completions**

The Arco Oil Co.'s No. 2 Stehlik, Section 6, League 3, Denton County school lands, was dry and abandoned at 1,851 feet. Barkley & Meadow's No. 26 L. F. Wilson, Lot 1, Section 88, A. T. N. C. L. Survey, was good for 60 bbls. at 1,521-29 feet. Grace Oil Co.'s No. 1 Murray was a failure and plugged at 1,861 feet. C. L. Granberry's No. 1 A. B. Edwards, Block 23, Madison County school lands, was dry and abandoned at 1,710 feet. Humble Oil & Refining Co.'s No. 8 L. F. Wilson, Section 125 A. T. N. C. L. Survey was good for 6 bbls. at 890-900 feet. The McCarty Oil Co.'s No. 20 L. F. Wilson in Lot 5, Section 2, H. & T. C. Survey, made 60 bbls. at 1,565-67 feet and 1,580-88 feet, total depth 1,589 feet. The same company's No. 28 L. F. Wilson "B", in the north 160 acres of the E. Hall Survey, was a 12-bbl. pumper at 902-914 feet.

Staley & Wynne and Prechel's No. 1 W. L. Andrews, Section 185, Club Ranch subdivision, was dry and abandoned at 1,620 feet. The Shasta Oil Co.'s No. 13 Mangold made 10 bbls. at 652-57 feet. The Tidal Oil Co.'s No. 1 A. D. Thompson was good for 25 bbls. at 1,572-78 feet. White Eagle Oil & Refining Co.'s No. 3 L. L. Marcell, in Madison County school lands, made 13 bbls. at 1,573-85 feet.

The Dale Oil Corp.'s No. 1 Meade estate in Block 39 of the Meade pasture, was plugged as a duster at 1,500 feet. Fisher & Gilliland's No. 10 Rogers was also a failure at 1,278 feet. Golding & Cochrane's No. 1 Herron, Block 1,853, T. E. & L. Survey, was dry and abandoned at 1,015 feet. Magnolia Petroleum Co.'s No. 3 Coffield-Gretta, in the A. R. Richardson Survey, A-356, was dry and abandoned at 1,501 feet. Murchison & Fain's No. 1 Young and others, Section 2,426, T. E. & L. Survey, was dry and plugged at 2,426 feet. The Pandem Oil Corp.'s No. 1 Thomas, in the Thomas Survey, was completed for 35 bbls. at 1,153-60 feet. The Petroleum Production Co.'s No. 2 Kunkel, Block 2, Thomas McCoy Survey, made 46 bbls. at 1,161-65 feet. Plains Production Co.'s No. 1 Prideaux, SW cor. of their lease in John Dorsey Survey, made 22 bbls. at 679-700 feet. Ray & Massie abandoned the location for their No. 1 Jeske. Shaw & Rathke's No. 2 Prideaux, Block 23, was good for 15 bbls. at 651-58 feet. The Texas Company's No. 8 Jeske, in the Thomas McCoy Survey, was dry and abandoned at 2,716 feet. The Texas-Consolidated Oil Co.'s No. 1 Hammering, Section 1, B. B. B. & C. Survey, was a duster at 1,503 feet. The Texas Fidelity Corp.'s No. 1 Longley estate in the J. B. Hinds Survey A-184, was dry and abandoned at 1,015 feet. Trio Production Co.'s No. 1 Darilek, Section 2,410, T. E. & L. Survey, was also a failure at 1,503 feet.

Gulf Production Co.'s No. 11 M. W. Jackson and others' "A" pumped 5 bbls. at total depth of 1,573 feet in sand. The same company's No. 8 L. W. McCrory, trustee, "C" was a 29-bbl. pumper at 1,407 feet, total depth, in broken sand and shale.

**Clay County**

Cumley & Stine's No. 2 Stine estate, made 10 bbls. at 1,837-44 feet.

**Montague County**

The F. H. E. Oil Co.'s No. 2 M. H. Salmon and others was temporarily abandoned at 1,203 feet. Humble Oil & Refining Co.'s No. 4 R. Hinds, in J. J. Wall Survey, made 80 bbls. at 906-11 918-23 and 935-41 feet. The Texas Company's No. 7 Gist "A", in the William Donoho Survey, was good for 42 bbls. at 928-44 feet, total depth 948 feet. Texhoma Oil & Refining Co.'s No. 5 Hinds, J. J. Wall Survey, made 60 bbls. at 932-36 feet and No. 6 Hinds was good for 82 bbls. at 909-26½ feet. Gulf Production Co.'s No. 6 R. W. Cunningham and others pumped 52½ bbls. at 995 feet in oil sand; No. 7 pumped 70 bbls. at 969 feet, total depth.

**Young County**

Barkley and others' No. 1 Bailey, Section 165 T. E. & L. Survey, was dry and abandoned at 975 feet; No. 1 E. Rogers, same section, pumped 82 bbls. at 859-68 feet. R. I. Carter's No. 10 Benson, Section 1,450 T. E. & L. Survey, made 15 bbls. at 912-38 feet and No. 11 Benson was good for 35 bbls. at 932-48 feet. Cosden-Consolidated Oil Co.'s No. 4 Benson, Section 1,391 T. E. & L. Survey, was a 35-bbl. well at 862-78 feet, and No. 5 was good for the same amount of oil at 860-81 feet. Lowery and others' No. 1 Stewart, in the S. Tynes Survey, was dry and abandoned at 631 feet. McElreath, Suggett & Phillips Petroleum Co.'s No. 2 Snyder, in the Robert Wilson Survey, was a failure at 625 feet and plugged. Pois & Weaver's No. 1 Whitehead, Section 166 T. E. & L. Survey, was a duster at 950 feet. Ramming & Saunders also completed a failure in their No. 1 Stewart, Section 7, Young County school lands, at 615 feet. Simms Oil Co.'s No. 1 Bryan, Section 1,367 T. E. & L. Survey, was dry and abandoned at 980 feet. Stafford & Haynes' No. 1 Dailey, S. Tynes Survey, was good for 24 bbls. at 561-66 feet. Sun Oil Co.'s No. 2 Dietrich, in the NE quarter of B. B. B. & C. Survey No. 4, A-1 700, swabbed at the rate of 150 bbls. daily from sand at 1,168-70½ feet. Tarkington and others' No. 2 Prideaux Brothers, NE cor. William Stoneham Survey, was dry and plugged at 615 feet. H. T. Wolf's No. 1 Blackman, in the R. Wilson Survey, was dry and abandoned at 765 feet.

**Throckmorton County**

Bridwell & Heydrick and the Humble Oil & Refining Co.'s No. 1 Upshur County school land, in Block 17, Knox Brothers Survey, was dry and abandoned at 2,361 feet.

**Shackelford County**

Roeser & Pendleton and Marland Oil Co.'s No. 11 Cook A-85, in Section 85, Block 10, E. T. R. R. Survey, flowed 700 bbls. initial from sand at 1,244-80 feet. Roeser & Pendleton's No. 3 Cook B-85, flowed 600 bbls. at 1,329-43 feet, and No. 7 Cook B-85 flowed 800 bbls. at 1,253-79 feet. White Brothers' No. 1 Dodson, Section 16 B. A. L., was dry and abandoned at 1,360 feet.

**Stephens County**

Mid-Kansas Oil & Gas Co.'s No. 4 G. W. Hill, Account 2, in the J. C. Talley Survey, made 40 bbls. at 3,170-90 feet. Mid-Tex Oil Co.'s No. 3 Morrison was

(Continued on Page 132)

# IF YOU CAN'T FIND AN OIL MAN, JUST ADDRESS HIM AT AMARILLO

By J. L. Dwyer
*Staff Correspondent*

AMARILLO, Tex., June 14.—Everybody's in the Panhandle and he brought his dog along. Amarillo is having one grand reunion of cable tool men; the first in a long time.

Joe O'Loughlin, formerly superintendent for the Vacuum Oil Co. in Rumania, but now getting his mail at Amarillo, is arguing with Joe Moriarity. They were driving along and almost had a collision. Says O'Loughlin, "Why didn't you stop, you know I put my hand out. We might have been hurt," to which Moriarity replies, "Joe, how in the ———— can I see your hand when it only has three fingers on it and I only have one eye?"

The one and only Granny Lewis arrived in town the other day. There may be no connection, but it is a fact that the very day Granny arrived and parked in the lobby, a Chinese restaurant opened. Remember Gypsy hill.

Claude Hildebrand is handling things for Phillips Petroleum Co. in the scouting department. Claude is the dean of the scouts at Amarillo.

Kork Kelley, formerly general superintendent of the Sinclair Gasoline Co., is construction contractor on the Phillips gasoline plant, and is to be seen in town.

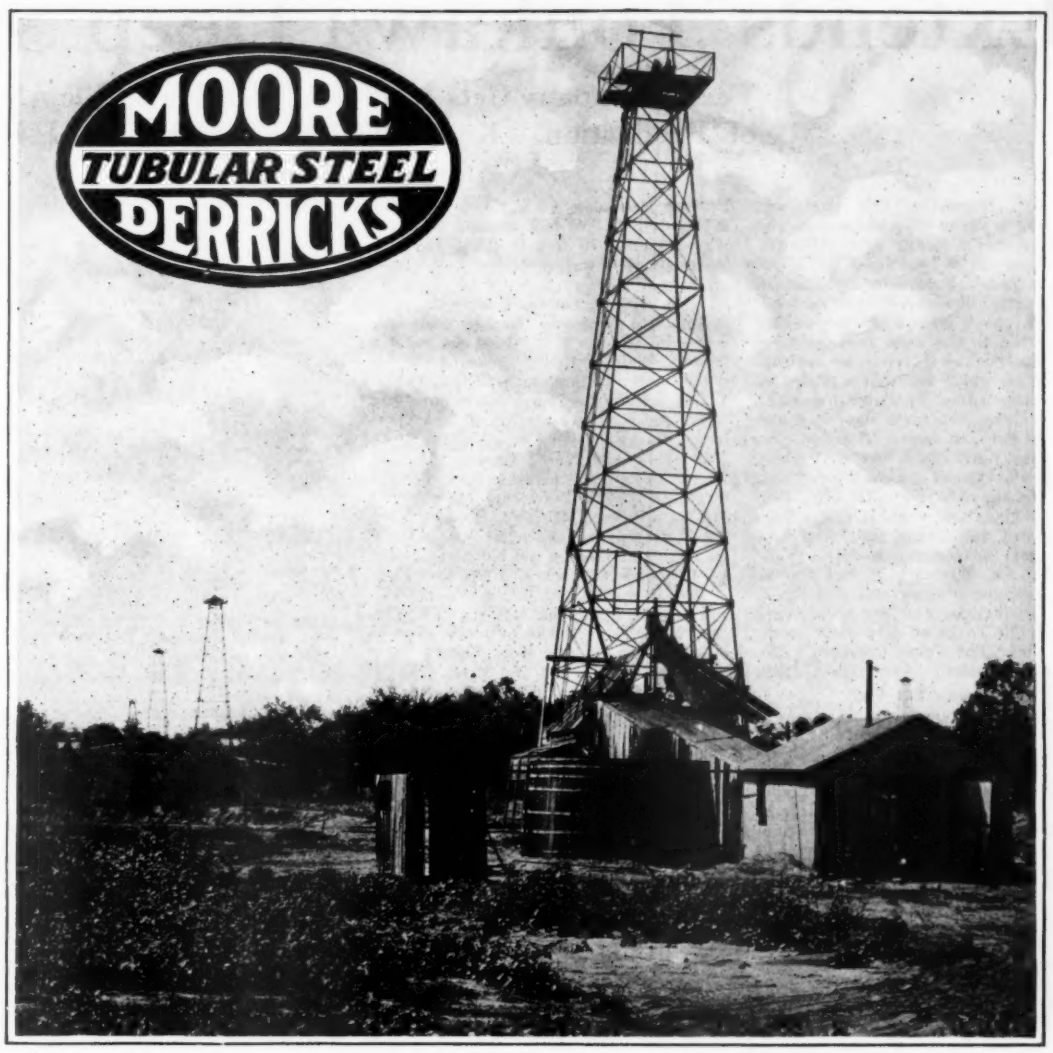
M. F. Moroney, formerly general manager of the North Baltimore Oil & Gas Association, has nothing to do, so he ambles down and makes a small investment, just purchased a few sections of land.

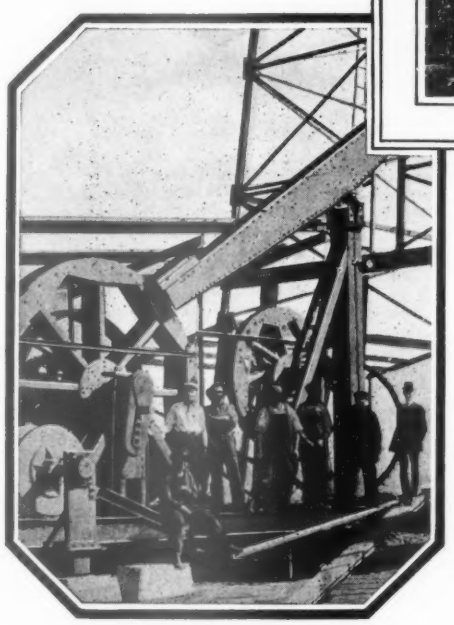
An elongated figure is strolling about the lobby distributing pamphlets. It proves to be Charles I. O'Neill, secretary of the Okmulgee District Oil & Gas Association. Championing the cause of Okmulgee. Out of place, in Amarillo. Just like carrying tires to Akron or beans to Boston.

Ralph H. Cummins, who manages the White Eagle Oil & Refining Co.'s affairs, is as busy as a one-armed paper hanger with the hives. He is accompanied by Fred Mallonee, general superintendent of the company. A. H. Carson, of the Ajax Iron Works, is seen with one of the new Ajax-Carson pumps, his invention. V. B. Peck, manager of the Mendenhall Torpedo Co., makes the rounds every week. Bill Lurcy, buyer for the Gulf Production Co., has returned from a trip to the south end of the state. Jim Boyle, drilling contractor from Tulsa, is looking the place over. P. F. Gwynn, operator of Wichita Falls, is making a visit. Boyd Logan, tool pusher from Oklahoma, is ambling around. Boyd is different now; he's all married up. Frank Dillard, formerly of Tulsa, Okmulgee, Okemah and Florida, or what have you, is a regular in the hotel lobby. Clyde Alexander, of the Phillips Petroleum Co., dropped down from Bartlesville to see how hard the wind is blowing.

The most auspicious group to reach town in some time was the Prairie special car. It contained the executives of both the Prairie Oil & Gas Co., and the Prairie Pipe Line Co.; W. S. Fitzpatrick, chairman of the board of the Prairie Oil & Gas Co.; Nelson K. Moody, president; Dana H. Kelsey, vice president and general manager and Fred S. Cook, superintendent of the land department, were along and so were W. F. Gates, president and general manager; C. H. Koontz, vice president and George H. Coyle, general superintendent of the Prairie Pipe Line Co. In fact the only missing face of the crew was Hub Meyer who stayed at home to take care of things in Independence.

If there's anyone you're looking for in Tulsa, and fail to locate, just address him at Amarillo.



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# Extends Tonkawa Deep Sand Area

## Texas Company Gets 2,400-Bbl. Well Half-Mile Ahead of Production. Kellyville Deep Sand a Real Find

By James McIntyre

The most interesting and significant well of the week in Oklahoma was The Texas Company's No. 2 Siler, SW cor. NE, Section 28-25-1w, Tonkawa Field, Kay County, which got sand at 4,280-86 feet and started flowing 100 bbls. an hour. It extends the Tonkawa Field one-half mile, making it the most northwesterly well in the Tonkawa deep sand horizon. The lease on which the well was drilled was formerly owned by Louis Friedman of Tulsa. On Saturday the well was flowing 95 bbls. an hour. The well produced over 7,000 bbls. the first three days. At the close of the week the Gypsy Oil Co. in the SW cor. NE SW, Section 28-25-1w, about a quarter of a mile southwest of the Texas well was rapidly nearing the completion depth. The Gypsy Oil Co. started this well on the theory that the location was directly in line of production, and some operators familiar with Tonkawa deep sand conditions thought The Texas Company's No. 2 was too far north to get the big pay.

### Kewanee's Big Well

That other Oklahoma sensation, the Kewanee Oil & Gas Co.'s No. 13 Stewart, CSL NE NW, Section 4-16-13, Bixby district, Tulsa County, which came in Monday of last week flowing around 3,500 bbls. a day of 53 gravity crude, was averaging 120 bbls. an hour on Sunday, with some salt water showing. For the first five days the well flowed steadily with an increasing output, but toward the close of the week it began flowing by heads, while at the same time its output declined and the salt water showed up. The well is said to have averaged fully 4,000 bbls. a day the first five days. This well is in one of the deep Wilcox series of sands. Other wells on the lease had been producing a long time from the upper Wilcox pay.

The Kewanee Oil Co.'s big well is not far from the spot where the Wilcox sand got its name. It was in Section 3-16-13 that Homer F. Wilcox drilled through the Mississippi lime and found a sand that yielded an initial production of 13 bbls per hour, which became known as the Mounds sand and later the Wilcox sand. Previously, however, the Selby Oil & Gas Co. in the SW cor. NW SE, Section 3-16-13, drilled into the same sand at 1,995 to 2,033 feet and got a 100-bbl. well. The company had two wells in this sand when Wilcox's first well in the same formation was completed. Selby called the sand the Kiefer sand for the reason that back in 1908 his company, together with the Laurel Oil & Gas Co., the Eastern Oil Co. and Gunsberg & Forman, drilling on the Anna Kiefer allotment, NW cor. SE, Section 29-17-12, Glenn Pool, Creek County, went through the Mississippi lime at 1,830 to 2,080 feet and found a pay at 2,345-80 feet and completed a 300-bbl. well. The Prairie Oil & Gas Co. now owns the lease and the well above mentioned is still pumping 20 years later. This is the earliest record of production in what is now universally known as the Wilcox sand, and which in past days was known in Osage County as the second break in the Mississippi lime. The name Kiefer sand was given it by the operators who drilled the well because it was drilled on the Kiefer allotment, but the name did not stick.

### More Good Ones in Kellyville

In the Kellyville Field in Creek County, where J. H. Wright drilled an old pumping well deeper, NW cor. SE, Section 24-17-10, Tahkaney allotment, and at a total depth of 2,495 feet found a 2,600-bbl. initial production, deepened No. 6 Tahkaney, NE cor. SE NW, Section 24, and got a 2,000-bbl. well in sand at 2,402-24 feet. In the same pool the Pioneer Petroleum Co.'s No. 6 Bucktrot, NW cor. SW SW NE, Section 24-17-10, was deepened 19 feet to 2,461 feet and its production was increased to 95 bbls. an hour.

### I. T. I. Sunday Gauges

Sunday's gauges on the four producing wells in the I. T. I. Pool in Section 24-9-6, Seminole County, showed the Indian Territory Illuminating Oil Co.'s No. 1 James, the discovery well, making 350 bbls.; same company's No. 1 Reed, 328 bbls. Barnsdall Oil Co.'s No. 1 Carter, 1,628 bbls. and No. 2 Carter 363 bbls. Eleven wells are drilling in Section 24.

The Magnolia Petroleum Co.'s No. 4 Davis, NW cor. NE NW, Section 6-7-8, Seminole County, was flowing 70 bbls. an hour and was net yet completed, sand at 4,105 feet, drilled to 4,108 feet.

The Barnsdall Oil Co. got a 680 bbl. well in No. 2 Randall, NW cor. NE, Section 10-12-11, Okfuskee County.

### Deep Drilling Near Tulsa

The Sunray Oil Co. and Munn's No. 4, SE cor. NW SE NW, Section 6-18-12, near the city of Tulsa, but in Creek County, which started off at 900 bbls. a day from sand at 2,138 to 2,160 feet, pay in the last 1 foot, was last reported producing 200 bbls. a day. It made 432 bbls. the first 4 hours. It is in the Wilcox sand. No. 3 on the same lease is a 20 bbl. pumper from the same sand with pay at 2,169-73 feet. The Riverland Oil Co.'s deep test, SW cor. SE NW, Section 28-18-11, Creek County, was abandoned as dry at 2,755 feet. Suppes and others drilled a failure at 2,290 feet in No. 4, CEL NE SW, Section 34-19-12, Tulsa County, and Glidden & Holmes have a duster in No. 3, SW cor. NE NW, Section 22-19-11, which was abandoned at 2,098 feet. The Crown Central Oil Co.'s No. 1, NE cor. NW NE, Section 15-19-10, an old well drilled deeper, was abandoned at 2,732 feet.

**Burbank Field, Week Ending June 9**

| | | |
|---|---|---|
| Lewis Oil Co. | 18 | 979 |
| Carter Oil Co. | 282 | 5,403 |
| Comar Oil Co. | 7 | 111 |
| Devonian Oil Co. | 16 | 121 |
| Mid-Co. Pet. Corp. | 106 | 1,092 |
| Gypsy Oil Co. | 193 | 2,566 |
| Kewanee Oil & Gas Co. | 26 | 218 |
| Laurel Oil & Gas Co. | 16 | 139 |
| Lorraine Petroleum Co. | 15 | 83 |
| Midland Oil Co. | 37 | 511 |
| Mid-Kansas Oil & Gas Co. | 42 | 857 |
| Peters & Oliphant | 3 | 542 |
| Phillips Petroleum Co. | 204 | 13,532 |
| Delmar Oil Co. | 16 | 728 |
| Phillips Petroleum and Skelly Oil Co. | 180 | 2,438 |
| Prairie Oil & Gas Co. | 127 | 3,076 |
| Producers & Refiners | 29 | 242 |
| Roxana Petroleum Co. | 54 | 522 |
| Seemans and others | 1 | 7 |
| Simons and Moore | 29 | 210 |
| Sinclair Oil & Gas | 144 | 1,325 |
| Skelly Oil Co. | 31 | 1,809 |
| Tidal-Osage Oil Co. | 42 | 457 |
| The Texas Company | 16 | 252 |
| Twin States Oil Co. | 24 | 322 |
| Total | 1,659 | 37,542 |

**Kay County Extension of Burbank**

| | | |
|---|---|---|
| George Bole | 2 | 194 |
| Carter Oil Co. | 11 | 866 |
| Comar Oil Co. | 17 | 1,041 |
| Mid-Continent Petroleum Co. | 16 | 765 |
| Gypsy Oil Co. | 18 | 308 |
| Laurel Oil & Gas Co. | 5 | 126 |
| Mid-Kansas Oil & Gas | 10 | 709 |
| Phillips Petroleum Co. | 32 | 2,055 |
| Prairie Oil & Gas Co. | 4 | 80 |
| Pure Oil Co. | 4 | 207 |
| Roxana Petroleum Corp. | 3 | 242 |
| Dye & Tomlinson | 3 | 208 |
| Skelly Oil and Phillips Pet. | 20 | 262 |
| Sinclair Oil & Gas Co. | 5 | 133 |
| The Texas Company | 16 | 143 |
| Twin State Oil Co. | 15 | 748 |
| Total | 192 | 8,087 |
| Total Field | 1,861 | 46,898 |

**Tonkawa Deep Sand**

Average daily production week ending June 9.

| | No. Wells | Prod. |
|---|---|---|
| Amerada Petroleum Co. | 7 | 1,635 |
| Pennok Oil Co. | 7 | 174 |
| Comar Oil Co. | 46 | 9,545 |
| Gypsy Oil Co. | 17 | 1,561 |
| T. B. Slick | 6 | 1,349 |
| McMan Oil & Gas Co. | 1 | 5 |
| Blackwell Oil & Gas Co. | 4 | 215 |
| Wentz Oil Co. | 14 | 6,184 |
| The Texas Company | 11 | 1,516 |
| Phillips Petroleum Co. | 1 | 3 |
| Mid-Continent and Marland Oil Co. | 6 | 1,761 |
| Total | 120 | 23,948 |

**Garber Deep Sand**

Daily average production of the deep sand wells in the Garber Fields for the week ended June 9 was as follows, by leases:

| Company and leases— | No. Wells | Bbls. Oil | Bbls. Water |
|---|---|---|---|
| Carter Oil Co., Dively | 2 | 106 | 75 |
| Franchot, Lynds | 1 | 75 | 40 |
| Healdton Oil & Gas Co. Belveal | 2 | 25 | 85 |
| Mid-Cont. and Marland, school land | 13 | 1,370 | 1,000 |
| Prairie O. & G., Wishard | 2 | 55 | 0 |
| Roxana Petroleum Corp. Schroeder | 26 | 12,658 | 3,500 |
| Roxana Petroleum Corp. Wolfe | 1 | 172 | 250 |
| Sinclair Oil & Gas Co.: Belveal | 5 | 211 | 165 |
| Denker | 2 | 82 | 30 |
| Hartley | 13 | 6,907 | 8,915 |
| W. Kisner | 7 | 3,811 | 1,545 |
| Shaffer | 1 | 40 | 2 |
| N. Walker | 22 | 6,614 | 3,780 |
| Grand total | 97 | 32,156 | 19,387 |

### Recent Burbank Completions

Recent completions in the Burbank Field in Osage County included the following wells:

The Phillips Petroleum Co.'s No. 13, NE cor. NW NW SW, Section 1-27-5, was shot with 90 quarts in sand topped at 3,029 feet and made 481 bbls. the first 24 hours. Skelly Oil Co.'s No. 1, SE cor. NW, Section 2-27-5, got sand at 2,903-65 feet and it produced 935 bbls. naturally the first 24 hours. Same company's No. 3, SE cor. SW SE NE, Section 12-27-5, was good for 100 bbls. the first 24 hours, following a 100-quart shot at 2,976-3,001 feet. The same company's No. 2, SW cor. SE SW SW, Section 7-27-6, found sand at 2,946-96 feet, shot it with 100 quarts and got a 248-bbl. initial producer; same company's No. 4, SW cor. SE SE SE, Section 7-27-6, produced 768 bbls. the first 24 hours after a 120-quart shot in sand at 2,936-97 feet, and its No. 16, SE cor. NE NE SE, Section 20-26-6, started at 360 bbls. after a 140-quart shot at 2,930-3,003 feet. Phillips Petroleum Co.'s No. 16, NE cor. SW, Section 21-26-6, found sand at 2,930-86 feet, shot it with 110 quarts and it made 250 bbls. the first day.

The Mid Kansas Oil & Gas Co. got two small wells out of Nos. 1 and 2 in the northwest quarter of Section 22-26-6. No. 1, SW cor. NW NW NW, Section 22, started at 15 bbls. after a 30-quart shot at 2,942-78 feet and No. 2, NW cor. SW NW NW, Section 22, made 30 bbls. after a 20-quart shot at 2,840-58 feet. There was also sand at 2,931-43 feet.

New work started in Osage County included the following operations: Phillips Petroleum Co.'s No. 4, NE cor. SE SE SW, Section 1-27-5, rig; same company's No. 8, SE cor. NE SE SW, Section 1-27-5, rig; same company's No. 5, SW cor. NW SW NE, Section 2-27-5, drilling at 300 feet; Skelly Oil Co.'s No. 2, SE cor. NE SE NW, Section 2-27-5, rig; No. 5, same lease, SW cor. NW SW NE, Section 12-27-5, rig; Phillips Petroleum Co.'s No. 6, C NE SW NE, Section 7-27-5. Phillips Petroleum Co.'s No. 5, SW cor. NW SW NE, Section 2-27-5, rig; same company's No. 6, C NE SW NE, Section 7-27-5, a rig; No. 7, same lease, SW cor. NW SE NE, Section 12, rig No. 8, SE cor. NE SE NE, Section 12, rig; same company's No. 12, NE cor. SE NE NE, Section 12-27-5, rig; No. 13, SW cor. NW NW NE, Section 12-27-5, rig; No. 14, NE cor. NW NW NE, Section 12-27-5, rig; same company's No. 15, SW cor. NW NE NE, Section 15-27-5, rig; Phillips Petroleum Co.'s No. 14, NW cor. NE NW SW, Section 7-27-5, drilling at 300 feet; same company's No. 13, NW cor. SE, Section 7-27-6, rig; same company's No. 11, C SW NE SW, Section 21-26-6, rig; No. 12, NE cor. SE NE SW, Section 21, drilling at 1,100 feet. Lewis Oil Co.'s No. 5, NW cor. SW NW SE, Section 21-26-5, drilling at 500 feet.

### Osage Developments

Outside of the Burbank Field, the following completions were reported in Osage County: Keener Oil & Gas Co.'s No. 11, C N half SW NE, Section 15-29-10, sand at 997-1,024 feet, shot with 120 quarts, 15 bbls.; H. W. Brown's No. 11, C NE SW SE, Section 15-29-11, sand at 966-1,001 feet, shot with 120 quarts, 10 bbls.; Noble Oil & Gas Co.'s No. 1, SE cor. Section 32-29-11, dry and abandoned at 1,145 feet; Tidal Osage Oil Co.'s No. 2, C NW SE NW, Section 1-27-7, sand at 2,530-78 feet, 20 bbls. naturally; Skelton & Moore's No. 9, SW cor. NW SE, Section 32-26-12, sand at 1,564-89 feet, shot with 100 quarts, 60 bbls.; A. G. Oliphant's No. 1-A, SE cor. SW SE SE, Section 19-25-8, sand at 2,452-60 feet, 10 bbls., after a shot, will be drilled deeper later; Lewis Oil Co.'s No. 9, CSL SW NW, Section 29-25-8, gas sand at 2,477-92 feet, oil sand at 2,492-2,506 feet, 125 bbls.; Tidal Osage Oil Co.'s No. 6, SE cor. SW, Section 24-24-8, sand at 2,120-95 feet, 15-bbl. well after a shot; Tidal Oil Co.'s No. 3, NE cor. SW NE SE, Section 20-24-9, sand at 2,175-95 feet, 100 bbls. after an 80-quart shot; Peters Petroleum Co.'s No. 5, CWL NE, Section 32-24-9, sand at 2,526-29 feet, 15 bbls.; Western American Oil Co.'s No. 10, SE cor. NE SW NE, Section 28-24-10, sand at 1,188-1,202 feet, 2 bbls. after a shot; Devonian Oil Co.'s No. 15, CNL SW, Section 34-25-11, sand at 1,659-1,700 feet, shot with 120 quarts, 50 bbls.; Plymouth Petroleum Co.'s No. 1, NE cor. NW NE NE, Section 1-24-11, dry and abandoned at 1,834 feet; C. B. Peters' No. 9, NE cor. SE NE SE, Section 12-23-8, sand at 2,095-2,125 feet, 50 bbls. after a 120-quart shot; Tidal Osage Oil Co.'s No. 25, SW cor. NE SW SE, Section 33-22-10, dry in Burgess sand, plugged back to Cleveland sand at 1,156-97 feet, 15 bbls. after a shot; Mid Kansas Oil & Gas Co.'s No. 2, NE cor. SE NE SE, Section 10-21-10, sand at 2,355-2,407 feet, shot with 200 quarts, 10 bbls.; same company's No. 7, C NW SE NW, Section 11-21-10, sand at 2,115-16½ feet, total depth, Peru sand at 1,570-95 feet, 6,000,000 feet of gas and 25 bbls. oil production; Swoveland and others' No. 3, SW cor. NW SW SW, Section 19-21-10, dry and abandoned at 2,611 feet; T. K. Smith's No. 1, NW cor. CNL NW, Section 33-21-10, dry and abandoned at 2,611 feet. Hivick and others' No. 1, NE cor. NE NW, Section 13-20-10, dry and abandoned at 2,680 feet; Sand Springs Home's No. 92, CSL N half S half SE, Section 23-20-10, sand at 1,950-51 feet, 5,000,000-foot gas production; Breen & Hohn's No. 1, C E half SE NE, Section 29-20-10, dry and abandoned at 2,180 feet; Tidal Oil Co. and Norris' No. 6, NW cor. SW NW SW, Section 15-21-12, sand at 1,899-1,946 feet (Wilcox sand) 10 bbls.; Kewanee Oil & Gas Co.'s No. 9, SW cor. Section 19-21-12, sand at 1,659-71 feet, 6 bbls.; Elliott & Smith's No. 24, NW cor. Section 30-21-12, oil sand at 1,668-77 feet, 63 bbls.; Grimes & Gillespie's No. 9, NE cor. SE NE SW, Section 31-21-12, sand at 1,359-1,460 feet, shot with 140 quarts, 40 bbls. Continental Oil Co.'s No. 15, SE cor. NE SW NW, Section 28-20-12, sand at 2,040-53 feet, 200 bbls.

### New Work in the Osage

The Ohio Osage Oil Co.'s No. 2, NE cor. NW NE SE, Section 32-26-11, rigging up; Peters Petroleum Corp.'s No. 5, CEL SW, Section 28-24-10, drilling at 725 feet; Pioneer Petroleum Co.'s No.

COOPER

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SIX months ago we were faced with a suggestion to lower prices still further. A steadily increasing sales volume, greater purchasing power and still better production tools and methods would have made an additional reduction possible. A careful study of the situation revealed that engine buyers had always recognized a higher quality in Cooper engines and in a majority of cases had been willing to pay extra for a better engine. We were convinced that what the trade wants is still better gas engines at reasonable prices---not necessarily cheaper engines.

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ENGINES

7, SE cor. SW SE NW, Section 5-20-11, drilling at 1,835 feet.

**Many Completions in Western Fields**

The Marland Refining Co.'s No. 7, SW cor. SE SE, Section 16-25-2w, Noble County, shot sand at 4,100-20 feet with 40 quarts, no production. The well had been drilled to 4,242 feet. It was plugged back to 4,083 feet for a test. The Pennok Oil Co.'s No. 1, NE cor. NW, Section 33-25-2w, was dry and abandoned at 3,548 feet. Marland Refining Co.'s No. 1, NW cor. NE, Section 6-24-2w, dry and abandoned at 5,086 feet; Harold Petroleum Co.'s No. 4, SE cor. Section 4-27-1w, dry and abandoned at 1,750 feet; Blackwell Oil & Gas Co.'s No. 2, NE cor. SE, Section 5-27-1w, 10,000,000-foot gas production and a hole full of water at 2,420-45 feet, not completed. The Texas Company's No. 2, NW cor. Section 9-27-1w, sand at 3,435-43 feet, pumped 30 bbls. of oil and 12 bbls. of water. Marland Refining Co. and Mid-Continent Petroleum Corp.'s No. 12, NE cor. SW SE, Section 16-24-1w, sand at 1,983-2,003 feet, 30-bbl. pumper after a shot; Mid Co. Petroleum Co.'s No. 15, SE cor. NE SW NW, Section 22-23-2w, sand at 2,003-22 feet, shot with 20 quarts, swabbed 53 bbls. to test, not completed; Mid-Continent Petroleum Corp. and Marland Refining Co.'s No. 17, SE cor. SW SE, Section 19-22-4w, Garber Field, Garfield County, sand at 4,556-97 feet, shot with 60 quarts, swabbed 51 bbls. initial production; Prairie Oil & Gas Co.'s No. 12, SW cor. SE, Section 12-22-4w, sand at 4,522-97 feet, 135 bbls. naturally; Mid-Continent Petroleum Corp. and Marland Refining Co.'s No. 53, SE cor. NE SE, Section 13-22-4w, sand at 3,602-11 feet, 456 bbls.; same companies' No. 68, NE cor. SE NE SE, Section 13-22-4w, sand at 3,050-61 feet, 888 bbls.; Sinclair Oil & Gas Co.'s No. 23 C. E. Walker, plugged back to sand at 3,599-3,607 feet, 595 bbls.; same company's No. 38 Walker, SE cor. NE NE, Section 13-22-4w, sand at 3,078-94 feet, 490 bbls., and 25,000,000-foot gas production; same company's No. 41 Walker, SW cor. SE NE, Section 13-22-4w, sand at 3,096-3,114 feet, 1,400 bbls.; No. 42 Walker, NW cor. SE NE, Section 13-22-4w, sand at 2,728-50 feet, 685 bbls. Sinclair Oil & Gas Co.'s No. 7 Austin, SE cor. NE SE, Section 36-22-4w, sand at 2,228-49 feet, 100 bbls.; Roxana Petroleum Corp.'s No. 4-H Schroeder, SE cor. SW NW SW, Section 18-22-3w, oil sand at 3,011-36 feet, and 3,104-16 feet, 1,323 bbls.; same company's No. 7-L Schroeder, sand at 3,975-3,123 feet, 1,607 bbls.; same company's No. 8-L Schroeder, NE cor. NW SW, Section 18-22-3w, sand at 3,039-67 feet, 437 bbls.; same company's No. 9-L Schroeder, SW cor. SE SW, Section 18-22-3w, sand at 3,045-52 feet, 2,277 bbls.; same company's No. 10-A Schroeder, NW cor. NE SW, Section 18-22-3w, sand at 2,827-38 feet, 100 bbls.; No. 11 Schroeder, SE cor. SW SE SW, Section 18-22-3w, sand at 2,185-95 feet, 312 bbls. of oil and 300 bbls. of water. Sinclair Oil & Gas Co.'s No. 8 Crews, CWL NE, Section 19-22-3w, sand at 1,186-98 feet, 100 bbls. naturally; Sinclair Oil & Gas Co.'s No. 28 Kisner, NE cor. NW NW, Section 19-22-3w, sand at 3,025-60 feet, 2,180 bbls.

**New Operations**

H. P. Glidon was drilling below 1,100 feet in No. 1-A Sharp, SW cor. SE NE SE, Section 9-24-1e, Noble County.

The Comar Oil Co. was rigged up to drill deeper in No. 1 Day, NE cor. SE, Section 20-29-1w, Kay County, old total depth 2,383 feet, and likewise in No. 5 Priboth, C NE NE NW, Section 21-29-1w, old total depth 2,096 feet, and was drilling below 2,400 feet in No. 8 Priboth, an old well, SE cor. NE NW, Section 21-29-1w The Braman Oil Co. was drilling deeper in No. 1, NW cor. SW SE SW, Section 5-28-1w, and was below 2,600 feet. Same company's No. 1-W on the same location was fishing for 8-inch pipe at 2,150 feet; same company's No. 2, NE cor. SE SW SW, Section 5-28-1w, was drilling at 2,417 feet in an old well. Its No. 3-W, NW cor. SW SE SW, Section 5-28-1w, was drilling below 1,100 feet. The Comar Oil Co.'s No. 6-W Biddle, SW cor. NE SW, Section 5-28-1w, and No. 7-W Betchel, NW cor. SE SW, Section 5-28-1w, were rigs. No. 3 Bechtel, C NE SE NW, Section 5-28-1w, was drilling at 446 feet. The Comar Oil Co.'s No. 3 McCullough, NW cor. SW SE, Section 5-28-1w, was rigged up to drill deeper, old depth 2,401 feet. Same company's No. 3-W Orr, NE cor. SE SW SW, Section 5-28-1w, is a rig. Blackwell Oil & Gas Co.'s No. 9 Geiger, SW cor. NW NE, Section 9-27-1w, is a rig; Otstot and others' No. 3, NW cor. SE NW, Section 16-27-1w, drilling below 300 feet.

The Twin State Oil Co. drilled deeper in its old No. 1, SE cor. NW, Section 31-27-2e, Kay County, got sand at 2,445-52 feet, and a 2,000,000-foot gas production. Six-inch pipe was being run.

The Wentz Oil Corp.'s No. 2, NW cor. SW, Section 16-29-1e, was drilling at 300 feet. The Vernon Oil & Gas Co.'s No. 4, SE cor. SW SE, Section 17-29-1e, was drilling below 800 feet.

**Holdenville District Completions**

The Independent Oil & Gas Co. and Holm & Jarvis' No. 2, C NE NE SE, Section 7-9-8, Seminole County, got sand at 3,271-3,312 feet. It made 100 bbls. after a small shot.

The Magnolia Petroleum Co.'s No. 4, C SE NW NW, Section 5-7-8, started at 1,865 bbls. a day from sand at 4,162-68 feet. Champlin and others' No. 1, C NE NE NE, Section 7-7-8, was abandoned as dry at 4,317 feet.

Jack Lloyd and others' No. 4, SW cor. SE NW NE, Section 6-3-7, Pontotoc County, was shot with 10 quarts in sand at 1,150-88 and 1,190-93 feet and started at 50 bbls. of 36 gravity oil. Hughes and others' No. 2, C E half SW NE, Section 28-4-7, Pontotoc County, was abandoned as dry at 1,420 feet.

The Mal Da Mac Oil Co.'s No. 1 Taylor, NW cor. Section 11-13-8, Okfuskee County, was abandoned at 4,116 feet. This test had sand at 420-50 feet and a hole full of water; Peru sand at 2,542-2,600 feet, show of oil and a hole full of water; sandy lime at 3,492-3,532 feet, with a rainbow of oil; 6⅝-inch casing was set at 3,508 feet; top of the white lime at 4,045 feet, Wilcox sand, with a hole of water at 4,088-4,106 feet.

Carter and others' No. 1, NW cor. Section 26-10-6, Seminole County, was drilling below 600 feet. Searight and the Carter Oil Co.'s No. 1 L. Grayson, SE cor. SW NE, Section 33-10-6, is a rig. The Mid-Continent Petroleum Corp.'s No. 1 Grayson, C NW SW SW, Section 34-10-6, was drilling below 1,600 feet.

The Devonian Oil Co. has a rig up for No. 2 Deer, C SW SW NE, Section 8-10-8, Seminole County.

The McCulloch Oil Co. has a rig up for No. 1 Carolina, NE cor. NW SE, Section 17-10-9, Okfuskee County.

J. K. Leard and others' No. 1, NW cor. SW, Section 8-11-11, Okfuskee County, was drilling below 650 feet; Champlin Refining Co.'s No. 8, C NE SW, Section 22-11-11, was drilling below 1,100 feet; same company's No. 1 A. Jeffries, SE cor. SW NW, Section 23-11-11, a rig; Future Development Co.'s No. 1, C NW SW NE, Section 21-10-11, drilling at 500 feet.

Tidal Osage Oil Co.'s No. 1, C SW SE SE, Section 3-8-4, Seminole County, was drilling at 400 feet.

Amerada Petroleum Corp.'s No. 1 Rentie, C SE SW NE, Section 23-9-6, Seminole County, is a rig; Indian Territory Illuminating Oil Co.'s No. 1 Harjo, C SW SW SW, Section 13-8-6, a rig; W. R. Ramsey's No. 2 Sampson, C SE SE SW, Section 31-8-8, drilling below 3,650 feet. Independent Oil & Gas Co. and Continental Oil Co.'s No. 2 J. Long, C SE NW SE, Section 32-8-8, rigged up; same companies' No. 3 Long, C SW NW SE, Section 32-8-8, rig; Magnolia Petroleum Co.'s No. 4 Scott, C NW SW SW, Section 33-8-8, rig; Prairie Oil & Gas Co.'s No. 2 Long, C SE SW SW, Section 33-8-8, old well drilling deeper, fishing at 3,310 feet. Transcontinental Oil Co. and Independent Oil & Gas Co.'s No. 10 Harjo, C NE SE SW, Section 26-9-9, a rig; Tidal Oil Co.'s No. 6 Haker, NE cor. SW SW, Section 3-9-11, rig.

The Southwestern Petroleum Co.'s No. 3, C SW SE NE, Section 18-9-8, Hughes County, is drilling at 500 feet; No. 4, C NW NE SE, Section 18-9-8, drilling at 500 feet; Winona Oil Co.'s No. 1, C SE NW NE, Section 18-9-8, drilling below 500 feet. Carter Oil Co.'s No. 1, C SW SW NW, Section 10-8-7, Seminole County, rigged up. Magnolia Petroleum Co.'s No. 1 Harris, Davis, C SW NE NW, Section 14-8-7, rig. Magnolia Petroleum Co.'s No. 1-A, C SW SE NE, Section 22-7-7, drilling at 700 feet; Amerada Petroleum Corp.'s No. 1-A, C SW SW NE, Section 5-7-8, drilling below 600 feet; Dixie Oil Co.'s No. 8, C SE NE NE, Section 5-7-8, drilling below 300 feet; Humble Oil & Refining Co.'s No. 1, C SE SE NW, Section 2-6-8, drilling below 300 feet.

**Okmulgee County**

Penrod & Thompson's No. 1 Barnett, C SE SW NE, Section 1-14-11, Bald Hill district, Okmulgee County, which was shot with 20 quarts in Wilcox sand at 2,860-70 feet, made a 25-bbl. initial production. Evans, Dow and others' No. 1 Taylor, SW cor. Section 20-14-11, was dry and abandoned at 3,115 feet. Dry Wilcox sand was topped at 3,108 feet. Sinclair Oil & Gas Co.'s No. 1 Huckaby, C SW NW NW, Section 22-14-12, was dry and abandoned at 3,159 feet.

J. M. McCormick's No. 4 Dean, CNL NE NW, Section 34-15-18, Muskogee County, was dry and abandoned at 1,103 feet. C. W. Bradley's No. 2, SE cor. NW SW, Section 5-14-19, made a 10-bbl. well in sand at 688-96 feet, shot with 20 quarts.

The Future Development Co.'s No. 4 Deere, NW cor. SE SE, Section 2-15-14, drilled to 400 feet and shut down; The Texas Company's No. 15, NW cor. SE NE, Section 21-15-14, was drilling at 400 feet. Becker & Hutchinson's No. 1 Berryhill, SW cor. SE SW, Section 4-14-13, rigged up; Wirick & King's No. 1-A Ware, SE cor. NE, Section 18-15-18, Muskogee County, rigged up; C. W. Bradley's No. 3 Howdeshall, SW cor. NW SW, Section 5-14-19, drilling at 400 feet.

C. C. Parker, trustee's, No. 1 J. A. Atkins, NW cor. NE SE, Section 36-13-12, was drilling at 400 feet; Cal Cul Oil Co.'s No. 8 Doyle, NW cor. SE SW, Section 15-13-14, machine rigged up; Simms Petroleum Co.'s No. 16 Doyle, NE cor. SW, Section 15-13-14, was drilling at 900 feet.

E. F. Hammond was drilling below 300 feet in No. 3 Douglass, NW cor. SE NW, Section 35-15-12. J. H. Rebold was drilling below 2,115 feet in No. 1 McIntosh, NW cor. SE, Section 5-14-11, corected location.

**Creek County**

The Gled Oil Co.'s No. 3, SW cor. SE NW NW, Section 13-19-8, was completed as a 2,000,000-foot gas well in sand at 2,362-78 feet. The Savoy Oil Co.'s No. 4, SE cor. NW SE, Section 22-17-8, got sand at 2,356-80 feet, which was shot, the well making ???? bbls. the first 24 hours. Kight and others' No. 1, SW cor. SW NW, Section 26-17-8, was shot with 80

(Continued on Page 152)

# McPHERSON COUNTY WILDCAT SHOWS OIL MANY MILES FROM PRODUCTION

By James McIntyre

A showing of free oil in a wildcat in McPherson County featured an otherwise uneventful week in the Kansas fields. E. B. Merriam and others' No. 1 Anderson, C SW, Section 29-18-2w, found the showing at 2,330 feet in a lime formation that showed traces of sand. Operations were suspended to await orders. There is no commercial production in McPherson County. The Merriam well is about 24 miles northwest of the Covert-Sellers Pool in Marion County.

The Manhattan Oil Co. and Phillips Petroleum Co. completed a 450 bbl. well, producing 41 gravity oil, from sand at 1,814-38 feet in their No. 1 Freeman, C NE SW NE, Section 19-24-11, Greenwood County.

**Butler County Completions**

Butler completions were of a routine character. The Empire Gas & Fuel Co.'s No. 94 Wilson, CNL S half N half SW, Section 21-25-5, was a 7-bbl. well at 630-40 feet. Sitring Brothers' No. 1-A, SE cor. NE SE NW, Section 2-27-5, made 15 bbls. a day after a shot in sand at 2,682-2,704 feet. Sparta Oil Co.'s No. 2, Schoenrock, C NE NE SW, Section 32-26-6, started at 25 bbls. naturally, from sand at 2,765-95 feet. The Sinclair Oil & Gas Co.'s No. 4 Barnhill, C NE NE SE, Section 22-27-7, got sand at 2,683-2,741 feet and was good for 180 bbls. initial production, following a 200-quart shot. The Phillips Petroleum Co.'s No. 1 Kruse, C SE NW NW, Section 27-27-7, made 50 bbls. the first 24 hours after a shot at 2,730-50 feet. The same company's No. 7 Truesdale, C NE SW SW, Section 27-27-7, started at 50 bbls. a day from sand at 2,740-71 feet, shot with 60 quarts. No. 8 Truesdale, C SE NW SW, Section 27-27-7, made a 65-bbl. initial production from sand at 2,747-77 feet, shot with 100 quarts. Rodgers and others' No. 7 McLaughlin, SW cor. NW SE NE, Section 33-27-7, found sand at 2,723-38 feet, shot it with 60 quarts and the well made 120 bbls. the first 24 hours. Lewis Oil Co.'s No. 3 McLaughlin, C SE NW NE, Section 33-27-7, made 10 bbls. of oil and 50 bbls. of water the first day after a shot in sand at 2,723-38 feet. Ables and others' No. 2 Drumm, C NE SE NE, Section 30-26-8, was shot in sand at 2,666-2,720 feet and started at 20 bbls. of oil and 50 bbls. of water. Eddy Farr's No. 1, C SW SE SE, Section 13-28-6, was shot with 40 quarts in sand at 2,695-2,715 feet. It showed 5 bbls. of oil and 50 bbls. of water.

Shawver and others' No. 1, SW cor. NE, Section 19-29-5, was abandoned as dry at 3,307 feet. Connell & Short's No. 1, SW cor. Section 22-28-6, was abandoned as a failure at 3,305 feet.

Stafford and others have a rig up for a twin well, No. 8 Stafford, C SE SE SE, Section 25-27-4. Sinclair Oil & Gas Co. and Empire Gas & Fuel Co.'s No. 10, C SW NE SE, Section 35-27-4, is drilling below 300 feet.

Richmond and others' No. 1, C SE SE SW, Section 8-27-6, was drilling at 1,560 feet. Phillips Petroleum Co.'s No. 1 Reynolds, C NE SW NW, Section 16-27-6, was drilling at 2,975 feet.

J. Herron and others have a rig on the ground for No. 1 Jones, C SW SW NE, Section 30-28-7.

**New Work in Butler**

New work in Butler County included the following operations: Connell & Ramsey's No. 2 (5-acre lot), C SW SE SW, Section 34-25-5, a rig; Magnolia Petroleum Co.'s No. 5 Skaer, C NW NE SW, Section 25-27-4, rig up. Sandy Hall and others' No. 1 Brower, C NE NW NW, Section 21-27-5, drilling at 300 feet; Wilcox & Reed's No. 1 McClure, C NE SE NE, Section 30-26-6, rig; Empire Gas & Fuel Co.'s No. 4 Young, C SE SE NW, Section 27-26-7, drilling below 1,000 feet; White Eagle Oil & Refining Co.'s No. 5 Wilhite, C SW NW SE, Section 27-26-7, drilling at 300 feet; Richmond Drilling Co.'s No. 1 Dedrick, C SE SE SW, Section 8-27-6, drilling at 1,600 feet; Kismet Oil Co.'s No. 1 Dixon, C SW SE NE, Section 11-27-6, drilling at 300 feet; H. H. Patton and others' No. 1 Schriver, C NW NW SW, Section 33-27-6, drilling at 425 feet; Magnolia Petroleum Co.'s No. 1 C. Schriver, C SE SE SW, Section 34-27-6, drilling at 400 feet; Connell & Sheldon's No. 1 Elliott, C NW SW NE, Section 19-27-7, rig; Mid Kansas Oil & Gas Co.'s No. 2 Harris, C SE SE NE, Section 22-27-7, drilling at 475 feet. Sinclair Oil & Gas Co.'s No. 5 Barnhill, C SE NE SE, Section 22-27-7, drilling at 450 feet. Flack and others' No. 2 Barnhill, C NW NW

(Continued on Page 151)

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# Louisiana Wildcats Disappointing

## Fail So Far to Find Production in Sands Expected to Develop New Pools. Lisbon Production Dropping

By James H. Dameron
*Staff Correspondent, Louisiana-Arkansas*

SHREVEPORT, La., June 12.—Life for the "eyes of the industry" in the Louisiana - Arkansas district the past seven days has been one wildcat after another. The scouts were not the only ones following the wildcat tests with interest. Practically every man connected with the industry whose interest is in production gave attention to the tests. But buoyant hopes for the opening of a new pool in either state tumbled as one after another of the tests in sands found during the past 10 or 15 days, failed in that particular horizon.

The most interesting of the tests now is the Triangle Drilling Co. and Gulf Refining Co.'s No. 1 Hollayfield, NE SE, Section 32-23-5, in the Summerfield area. Casing has been set in sand rock at 2,726 feet preparatory to a test. However, drilling is being delayed while junk is being fished out of the hole. Another attracting attention in Claiborne Parish is Triangle's No. 1 Keen, Section 7-19-5. At 4,164 feet the test showed a little gas through salt water encountered higher up in the hole. Casing was set and a test is to be made at that depth.

In Bossier Parish Woodley & Collins' No. 1. L. & A., Section 14-23-12, tested dry without a showing of oil at 2,711-18 feet. In De Soto Parish J. P. Evans' No. 1 Sutherlin, Section 20-12-14, was another disappointment at 2,750 feet and is now in hard lime at 2,776 feet.

Along the Caldwell-Angelina flexure another shallow test failed. It was in Red River Parish and was given up at 1,360 feet. Another of the deep tests bidding for attention is the Southern Crude Oil Purchasing Co. and Ramsey's No. 1 Munn, Section 1-22-10, in the Shangaloo district. Casing has been cemented at 3,347 feet. In Jackson Parish El Dorado Chief Oil Co.'s No. 1 Rodgers, Section 8-14-3w, claims to have had a gas showing at 1,050 feet and casing is being lowered to make a test.

### Arkansas Tests

Two of Arkansas' wildcats to test sands both failed to find production. Southern Crude Oil Purchasing Co.'s No. 1 Calion Lumber Co., Section 1-16-14, got a batch of salt water in sand at 2,589-93 feet and is to be drilled deeper. Wheeler Oil Co.'s Clark County test, No. 1 Brown, Section 35-10-20, tested dry at 2,304-07 feet. Whether the test will be drilled on down for deeper sands has not been determined by the operators.

In the Bradley Pool, just east of Bradley in Lafayette County, Arkansas, the Arkansas Fuel Oil Co.'s No. 3 Allen, Section 18-19-24, was put on the beam and pumped 60 bbls. of oil and 225 bbls. of salt water the first eight hours. Production is coming from 2 feet of cap and 2 feet of sand topped at 2,778 feet. It is the second well in that freakish pool which is surrounded by salt water wells in every direction save to the northwest.

Drilling operations along the Caldwell-Angelina flexure continue to grow and lease trading in that huge area is still brisk. Another big lease deal was completed the latter part of the week when the Southern Crude Oil Purchasing Co. stepped in and took a 30,000-acre lease in Caldwell Parish. The acreage is in Townships 11, 12, 13 and 14 and Ranges 4, 5 and 6 east. By the terms of the lease the Southern is to drill four geological tests, one of which is to be started before July 20 this year. One deep test to at least 2,500 feet is to be drilled and commenced not later than July 20, 1927.

Caddo Parish's interest was centered around the Standard Oil Co.'s and D. C. Richardson's wells, Section 13-20-15, in that area which extended the Caddo Field a few months ago. Richardson's well, No. 13 Youree-Randolph, was put on the pump and is making 240 bbls. of oil along with some salt water at 2,269 feet, a much better well than the Caddo extensioner.

The Standard's well is one-quarter of a mile south and had 4,000,000 feet of gas at 2,267 feet. The well was deepened to 2,670 feet where a showing of oil was encountered but the gas production was cut down. It is to be deepened a little more.

### Urania Quiet

Little happened of an exciting nature in Urania save the O. W. Clark No. 3 Harper, Section 26-10-1e, just across the parish line into Winn Parish. The well was shot down in a hurry, starting on the second of the month and in 4 feet of sand topped at 1,478 feet, seven days later. The hole is standing full of oil but the well is to be deepened in an effort to make it flow.

Natural Gas & Fuel Corp. has started work on the erection of a 55,000-bbl. storage tank in Urania and has announced plans for the erection of two 10,000-bbl. tanks at a later date. The tank farm is in the NW NW, Section 35-10-1e. Gathering lines will be laid to handle the company's own production and possibly production from other leases.

For the second consecutive week the big Monroe gas field gained the spotlight, this time through the completion of the biggest gasser to be completed in that large field in more than two years. The well was the Palmer Corp.'s No. 1 Millsap, Section 36-20-4e, which gauged 41,632,000 feet of gas at 2,187 feet. Drilling operations in the field continue on the climb.

Field operations in both states showed a gain over the previous week. Louisiana gained the most and still leads in operations because of the huge wildcat play. At the end of the week a summary revealed 52 completions, 29 wells waiting on standard rigs, 20 temporarily abandoned, 255 tests drilling, 31 rigged and ready to drill, 75 derricks in the fields and 14 locations staked.

Production in both states fell off during the week, the daily average decline being 3,655 bbls. in comparison to the past week's report. Every field in Arkansas declined in output while only three fields in Louisiana could boast a slight gain.

Louisiana's daily loss was around 700 bbls., while Arkansas' was close to 3,000. The drop in Arkansas came from the natural rise and fall of Smackover and the rapid fall in Lisbon's output when new production fails to offset the drop of old completions.

**Production By Fields**

| | |
|---|---|
| **Louisiana** | |
| Bellevue | 2,405 |
| Caddo light | 10,095 |
| Caddo heavy | 2,835 |
| Cotton Valley | 8,670 |
| De Soto and Red River | 3,970 |
| Elm Grove | 605 |
| Haynesville | 10,000 |
| Homer | 5,700 |
| Urania | 16,420 |
| Total | 60,700 |
| **Arkansas** | |
| Smackover heavy | 131,495 |
| Smackover light | 16,800 |
| El Dorado | 8,930 |
| Lisbon | 10,480 |
| Nevada | 2,700 |
| Stephens | 1,825 |
| Total | 172,230 |
| Total both fields | 232,930 |
| Total last week | 236,585 |
| Difference | 3,655 |

Another 1,000-bbl. well featured the week in Urania which showed 14 new oil wells with a combined production of 1,710 bbls. and 3 failures.

The big well was J. S. Abercrombie & Co.'s No. 7 M. M. King, Section 25-10-1e, which is flowing 1,000 bbls. of clean oil daily through a half-inch choke from sand at 1,519-24 feet. Abercrombie's No. 15 King, Section 25-10-1e, is making 45 bbls. on the pump from sand at 1,546-49 feet. Arizola Petroleum Co.'s No. 6 Tannehill, Section 36-10-1e, is pumping 45 bbls. daily at 1,447-50 feet. Bailey and associates' No. 1 Holmes, Section 26-10-1e, is pumping 50 bbls. from 6 feet of sand topped at 1,521 feet. Carter & Hurley's No. 1-B Urania, Section 7-10-2e, got salt water at 1,604 feet and was abandoned. O. W. Clark's No. 2 Bass, Section 25-10-1e, is pumping 50 bbls. of fluid, 20 per cent salt water, from sand at 1,541-45 feet. J. Q. Graves' No. 1 King, Section 25-10-1e, is making 10 bbls. from 4 feet of sand topped at 1,542 feet. A. E. Hudson's No. 1 Urania, Section 7-10-2e, is an abandoned location. H. L. Hunt's No. 10 Tullos Heirs, Section 26-10-1e, was completed at 1,488-92 feet for a 40-bbl. pumper.

Louisiana Oil Refining Corp.'s No. 32-B Tremont, Section 25-10-1e, is making 200 bbls. naturally from sand at 1,538-42 feet. Natural Gas & Fuel Corp.'s No. 7-B Urania, Section 18-10-2e, is flowing 50 bbls. daily from sand at 1,515-17 feet. Its No. 8-B on the same lease was completed at 1,513-16 feet, flowing 75 bbls. Same company's No. 9-B, Section 18-10-2e, was dry and abandoned at 1,547 feet. Ohio Oil Co.'s No. 3 Urania, Section 24-10-1e, is making 5 bbls. on the pump at 1,552 feet. L. E. Ozley's No. 2 fee, Section 26-10-1e, was completed at 1,532-40 feet, making 60 bbls., 20 per cent salt water, on the pump. Shreveport Oil Corp.'s No. 1 Urania, Section 8-10-2e, missed the sand and was abandoned at 1,712 feet. O. F. Whittaker's No. 4 King, Section 36-10-1e, is making 50 bbls. on the pump from sand at 1,521-25 feet. Williams Drilling Co.'s No. 5 Herbert, Section 26-10-1e, was finished in sand at 1,508-20 feet, flowing 30 bbls. daily.

### Casing Cemented

Six-inch casing was cemented at 1,511 feet at Arizola Petroleum Co.'s No. 8 Tannehill, Section 36-10-1e. Ayers and associates' No. 1 Miller, Section 31-11-2e, is drilling in gumbo at 1,285 feet. Cherokee Petroleum Co.'s No. 2 Louisiana Central, Section 19-11-3e, cored white lignite sand at 1,495 feet. Six-inch casing was cemented at 1,513 feet at Hardtner Oil Co.'s No. 5 Urania, Section 7-10-2e, and a derrick is up for No. 4 Urania, 165 feet north and 450 feet east NW cor. NE SE, Section 7-10-2e. Six-inch was cemented at 1,482 feet at Hunt and associates' No. 12 Tullos heirs, Section 26-10-1e, and No. 13 Tullos heirs is drilling below the 600-foot level. Six-inch casing was cemented at 1,506 feet at Hunt McCurry & Zoder's No. 2 Urania, Section 7-10-2e. A test of 4 feet of broken sand topped at 1,530 feet at Keene & Woolf's No. 4 Urania, Section 19-10-2e, showed only a little oil and formations are being cored at 1,536 feet.

On the Louisiana Oil Refining Co.'s A Tremont lease, Section 4-9-2e, No. 7 is coring at 1,528 feet and No. 8 is coring at 1,535 feet. On the Louisiana's B Tremont lease, Section 25-10-1e, No. 5 is drilling at 1,435 feet and No. 19, 190 feet south and 110 feet west NE cor. SE NE, is a rig. Love and associates' No. 4 Zimmerman, Section 25-10-1e, is shut down at 1,100 feet waiting for water. Ten-inch casing was set at 101 feet at Montague Oil Co.'s No. 2 Zenoria Lumber Co., Section 11-9-1e. W. T. Murray's No. 2 Doughty, 100 feet south and 150 feet east NW cor. SE NW, Section 36-10-1e, formerly Cleve Love and associates' lease, is drilling at 250 feet. A rig is up for Standard Oil Co.'s No. 1 Cockerham, 200 feet south and east NW SW SW, Section 36-10-1e. George W. Wetherbee's No. 1 Urania, 220 feet north and 660 feet west SE SW SW, Section 2-9-1e, is a rig.

Natural Gas & Fuel Corp. led in field operations in Urania with 12. Six-inch was set at 1,066 feet at No. 1 Cockerham, Section 36-10-1e. No. 5-B Urania, Section 18-10-2e, is in sand at 1,524-33 feet and waiting for a standard rig. The cement plug is being drilled out at 1,506 feet at No. 3-E Urania, Section 18-10-2e; 6-inch was cemented at 1,502 feet at No. 4-E; No. 5-E is drilling at 500 feet; No. 6-E Urania, 300 feet south and west NE cor. NW SE, is a rig; No. 7-E is drilling at 400 feet and No. 8-E Urania, 300 feet north and west SE cor. NE SE, is a derrick. Six-inch was cemented at 1,540 feet at No. 1-F Urania, 125 feet north and 96 feet west SE cor. Section 24-10-1e. A rig is up for No. 1-K Urania, 150 feet south and east NW SW SE, Section 18-10-2e, and derricks are up for No. 2-K Urania, 150 feet south and west NE SE SW, and No. 3-K Urania, 150 feet south and west NE cor. SW SE, Section 18-10-2e.

### Bossier Parish

Square Deal Oil Co.'s No. 1 Hale & Rumbough, Section 17-18-11, was abandoned at 1,238 feet where it tested salt water with a light show of oil. Autrey and associates' No. 2-C Smith, Section 23-19-11, was completed at 429 feet making 500,000 feet of gas 1 bbl. of oil and 500 bbls. of salt water. In the Bellevue Field, R. L. Crook's No. 4 Larkin, Section 14-19-11, is shut down at 400 feet.

In the wildcat territory Arkansas Fuel Oil Co.'s No. 1 Murray, Section 12-23-14, is being reamed to the bottom at 3,466 feet. Doern and associates' No. 1 Bollinger, Section 9-22-11, is drilling at 1,850 feet. Six-inch casing was set at 2,702 feet at Woodley & Collins' No. 1 L. & A. Oil Co., Section 12-23-12, and the sand was dry at 2,711 feet. The liner was pulled and the hole deepened 6 feet where the sand was also dry.

### Caddo Parish

Caddo Parish's three completions during the week were small producers. The Texas Company's No. 18 D. H. Raines, Section 15-21-15, is making 5 bbls. on the pump from sand at 1,700 feet. Gilliam Syndicate's No. 1 Sellington, Section 17-21-14, is making 5 bbls. of oil and considerable salt water at 907 feet and Dixie Oil Co.'s No. 76 Robertshaw, Section 14-21-15, is pumping 12 bbls. from 1,612 feet.

W. D. Chew's No. 1 Caddo L. B., Section 9-20-16, is drilling at 500 feet. Chew's No. 4 fee, Section 33-21-16, is drilling at 1,840 feet. Dixie's No. 1 Jolly, Section 27-22-15, is literally feeling its way ahead in lime at 4,092 feet. Dixie's No. 16 Muslow, Section 7-20-15, is drilling at 2,175 feet. Six-inch casing was cemented at 885 feet at Gilliam Syndicate's No. 1 Cummings, formerly No. 2 Sellington, Section 20-21-14. Six-inch casing was cemented at 2,100 feet at Galloway and associates' No. 1 Burglass, Section 15-21-16. Gulf's No. 1 J. M. Byrd, Section 2-19-14, is drilling in gray sand at 2,070 feet. On the Gulf's Ferry Lake lease, Section 15-20-16, No. 234 is waiting for a standard rig at 2,283 feet; 6-inch was cemented at 2,159 feet at No. 235; No. 240 is rigging; No. 243 is a derrick, and location has been staked

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for No. 246, 2,340 feet east and 220 feet north SW cor. On the Gulf's Ferry Lake lease in Section 16-20-16, No. 233 is waiting for standard rig at 2,283 feet; 6-inch was set at 2,150 feet at No. 236; No. 237 is being bailed to test at 2,287 feet and has 600 feet of oil and 150 feet of water in the hole; No. 242 is a derrick and location has been made for No. 244, 2,870 feet north and 994 feet west SE cor. In Section 21-20-16, No. 238 Ferry Lake is drilling in chalk rock at 1,641 feet. Gulf's No. 239 Ferry Lake, Section 22-20-16, is drilling in gumbo at 1,093 feet and a derrick pattern is on location, 300 feet south and east NW cor. Section 22 for No. 245. Gulf's No. 1-E Muslow, Section 35-21-15, is drilling in hard gray lime at 3,754 feet and No. 12 Tyson, Section 14-21-15, is drilling in sandy lime at 3,754 feet.

Lewis Oil Corp.'s No. 15 D. H. Raines, Section 22-21-15, is drilling at 1,100 feet. Magnolia's No. 16 Dillon, Section 24-21-15, is going through lime at 2,205 feet and No. 17 Dillon is drilling through broken lime at 2,241 feet. Magnolia's No. 1 Spell, Section 29-21-15, is boring through hard lime at 3,101 feet. A derrick is up for Magnolia's No. 1 Waterman Lumber Co., 1,350 feet east and 950 feet south, NW cor. Section 18-17-16. Magnolia's No. 1 Wiley Bradford, Section 24-21-15, is being reamed to the bottom at 3,616 feet and same company's No. 22 Raines, Section 22-21-15, is waiting for a standard rig at 1,665 feet. Manie Drilling Co.'s No. 1 Cunningham, Section 15-17-14, is shut down at 2,300 feet. A derrick is up for McGoldrick and associates' No. 9 Murray, Section 14-21-15. A rig is up 200 feet south and west NE cor. SE SW, Section 13-20-15, for Murphy & Jones' No. 1 Youree-Randolph. Six-inch casing was set at 1,020 feet at R. B. Nelson's No. 1 Files & Shanks, Section 24-22-15, and the test is shut down for a standard rig. No. 2 on the same lease is being rigged up.

Ohio Oil Co.'s No. 1 Ardis, Section 1-21-15, is fishing at 4,656 feet. A rig is up 456 feet north and 2,226 feet west SE cor. Section 12-21-15, for Ohio's No. 26 Smith. A derrick is up for Ramsey and associates' No. 1 Muslow, Section 32-21-15. Standard Oil Co.'s No. 1 Bettie S. Youree, Section 13-20-15, is making 4,000,000 feet of gas at 2,267 feet and is being deepened. Standish Oil & Refining Co.'s No. 7 Allen, Section 23-22-15, is a rig. The Texas Company's No. 47 C. M. L. Co., Section 23-21-15, is drilling in white lime at 2,751 feet. The Texas Company's No. 62 Caddo L. B., Section 33-21-16, is in shale at 2,037 feet; No. 63 Caddo L. B., Section 14-21-16, is drilling at 270 feet. The Texas Company's No. 2-B Jeems Bayou, Section 16-20-16, is being bailed at 2,294 feet, and has 200 feet of oil in the hole. Same company's No. 53 Harrell, Section 2-21-16, is being reamed to 1,042 feet where 6-inch will be set. The Texas Company's No. 7 Herold, Section 14-21-15, is being bailed to test at 1,650 feet. A rig is up for The Texas Company's No. 3-B Hobbs, 1,980 feet north and 860 feet west, SE cor. Section 21-21-15. Tholl Oil Co.'s No. 10 Bashara, Section 23-21-15, is a rig and No. 9 Huckaby, Section 14-21-15, is drilling at 270 feet. A rig is up for Victor Wenzel's No. 1 Hunsicker, 1,200 feet west and 627 feet north SE cor. Section 15-20-15. Woodley Petroleum Co.'s No. 2 Knight, Section 35-16-12, is being bailed to test 43 feet of broken sand topped at 1,908 feet.

**Caldwell Parish**

Cherokee Petroleum Co.'s No. 1 Louisiana Central, Section 10-11-2e, is drilling in green sand at 1,437 feet. Arrangements are being made to resume drilling at 1,150 feet at Standard Drilling Co.'s No. 1 Cruse, Section 30-11-4e.

**Claiborne Parish**

Brown and associates' No. 1 Beard, Section 28-19-5, is drilling at 2,100 feet. Gilliland & Ramsey's No. 1-D Taylor, Section 14-23-8, is drilling in brown shale at 3,775 feet. A rig is up for Standard Oil Co. of Louisiana's No. 35 Lowenberg, 430 feet north and 1,408 feet east SW NW NE, Section 24-21-6. Triangle Drilling Co.'s No. 1 Hollayfield, Section 32-23-5, is drilling in sand rock at 2,726 feet and Triangle's No. 1 Keen, Section 7-19-5, is waiting for 5⅞-inch casing to set at 4,164 feet.

**DeSoto Parish**

Ohio Oil Co.'s No. 1 Cody, Section 34-12-16, was abandoned at 3,001 feet, corrected depth. J. P. Evans' No. 1 Louisiana, Section 15-12-14, is shut down at 2,600 feet. Evans' No. 1 Sutherlin, Section 20-12-14, is drilling in hard lime at 2,776 feet. Magnolia's No. 1 Bond, Section 27-12-11, is going through hard lime at 2,998 feet. Six-inch casing was cemented at 2,500 feet at A. H. Tarver's No. 1-B Matthews, formerly No. 4, Section 29-12-11. J. C. Walton's No. 1 Chaffraix, Section 36-12-11, is shut down at 2,000 feet.

**Grant Parish**

Bradley & Cozart's No. 1 Holmes, Section 16-9-1e, is fishing for the drill stem at 1,330 feet. Finn and associates' No. 5 Ball & Cody, Section 13-8-1w, is shut down in rock at 2,294 feet waiting for orders. Finn & Hurdley's No. 1 Ball, Section 32-7-1w, is drilling in gummy shale at 1,815 feet. Arrangements are being made to abandon Gulf Refining Co.'s No. 1 Swope, Section 18-9-1e, in blue shale at 2,192 feet. Humble company's No. 2 L. & A., Section 3-9-1w, is shut down at 1,456 feet for water; No. 4 L. & A., Section 6-9-1w, is drilling at 645 feet and a derrick is being built for No. 6, Section 16-9-1w, and No. 6, Section 8-9-2w, is drilling at 65 feet.

**Monroe District**

Three gas wells with a combined opened flow capacity of almost 50,000,000 feet of gas were added to the Monroe Field's large string of producers. The biggest was Palmer corporation's No. 1 Millsap, Section 36-20-4e, which gauged 41,632,000 feet from 2,187 feet. Southern Carbon Co.'s No. 48 fee, Section 35-19-4e, gauged 4,126,000 feet at 2,210 feet. Sam D. Hunter's No. 1 D'Arbone, Section 32-19-3e, gauged 2,626,000 feet at 2,220 feet.

In Morehouse Parish, Feazel's No. 1 Archer, Section 22-20-4e, blew out at 867 feet where 8-inch casing was cemented. Gas and water are coming from behind casing and efforts are being made to kill the flow. In Ouachita Parish, Central company's No. 1 Kerr, Section 12-9-4, is down 725 feet where the drilling stem is stuck. Eight-inch casing was cemented at 832 feet at Hatcher & Evans' No. 4 fee, Section 17-19-4e. A derrick is up for Hodge & Hunt's No. 1 Miller Roberts, 825 feet south and 660 feet west NE cor. Section 11-18-4e. Surface casing was set at 187 feet at J. M. Huber's No. 3 Banks, Section 36-19-4e. A rig is up for R. J. O'Brien's No. 1 Ray & Green, 674 feet north and 740 feet west SE cor. Section 2-18-4e, and location has been made 660 feet south and west center of Section 35-9-4e, for No. 2 Ray & Green. Location has been staked for Ouachita Gas Co.'s No. 6 Smith, 2,232 feet north and 1,599 feet east, most southerly corner Section 37-20-4e.

Six-inch casing was cemented at 2,177 feet at Palmer corporation's No. 3 fee, Section 24-19-4e. Six-inch is being set at 2,108 feet at United Carbon Co.'s No. 2 Wilson, Section 24-20-4e. A rig is up for Southern Carbon Co.'s No. 49 fee, Section 35-19-4e. In Union Parish, Southern Carbon Co.'s No. 2-B Grayling, Section 32-21-4e, is drilling below the 800-foot level. A derrick is up for Ruston Drilling Co.'s No. 2 Parks, 1,002 feet west and 1,410 feet south NE cor. NE NW, Section 30-20-4e. Same company has made location 1,007 feet west and 1,078 feet south, center Section 30-20-4e, for No. 1 Mayfield.

**Webster Parish**

Two wells, both pumpers, were completed in Cotton Valley last week. Magnolia Petroleum Co.'s No. 1 Turner, Section 21-21-10, was finished at 2,540-45 feet for a 50-bbl. pumper and Louisiana Oil & Refining Corp.'s No. 4 Crichton, Section 21-21-10, made 30 bbls. on the pump in sand at 2,520-29 feet.

Alabama Petroleum Co.'s No. 4-B Robbins, Section 21-21-10, has 900 feet of oil in the hole from sand at 2,558-72 feet and is waiting for a standard rig. Humble is drilling at 365 feet in the second hole for No. 1 R. R. Cox, Section 22-21-10. The first hole was junked at 4,214 feet. Magnolia's No. 2 Turner, Section 21-21-10, is drilling at 1,800 feet. Ohio Oil Co.'s No. 1 W. Cox, Section 23-21-10, is grinding through lime at 5,393 feet. Ohio's No. 1 Holloway, Section 23-21-10, is drilling at 3,715 feet and its No. 7 Sidney heirs, Section 16-21-10, is drilling around 1,000 feet. Smitherman & McDonald's No. 1 Oakley, Section 29-33-11, is reaming to the bottom at 4,185 feet.

**Winn Parish**

Cedar Creek Petroleum Co.'s No. 1 Sullivan, Section 6-10-2w, is going through gumbo at 1,700 feet. Cherokee Petroleum Co.'s No. 1 Urania, Section 13-11-1e, has been temporarily abandoned at 1,740 feet. O. W. Clark's No. 2 Harper, Section 26-10-1e, had the sand at 1,478-82 feet and has a hole full of oil. The hole is to be deepened in an effort to make the well flow. Humble Oil & Refining Co.'s No. 1 William Edenborn, Section 1-9-3w, is coring green sand at 1,652 feet. Hunt and associates' No. 1 Edenborn, Section 8-9-3w, is drilling at 1,065 feet. Keene & Woolf's No. 1 Radescich, Section 21-12-3w, is drilling in gumbo at 1,200 feet. Ohio Oil Co. has made location 330 feet south and east NW cor. SW SW, Section 4-12-1w, for No. 1 Edenborn, Section 4-12-1w. C. H. Wilson's No. 1 Louisiana Central, Section 24-13-1e, is drilling at 1,365 feet.

**Scattered Wildcats**

In the rank wildcat territory two more tests were given up as failures. J. B. Greer's No. 1 Peavy-Wilson, Section 24-5-9w, Sabine Parish, was abandoned at 2,050 feet. The test struck fresh water in sand at 1,969-85 feet. In Red River Parish, Carnahan & Kyle's No. 1 Hollingsworth, Section 24-12-11, is dry and abandoned at 1,360 feet.

Arrangements are being made to test at 1,050 feet at El Dorado Chief Oil Co.'s No. 1 Rodgers, Section 8-14-3w, where it is claimed a showing of gas was encountered. In Lincoln Parish, Arkansas Fuel Oil Co.'s No. 1 Cooper, Section 3-20-4w, is drilling at 482 feet and 12½-inch casing is to be set around that depth. Bannon and associates' Madison Parish test, No. 1 C. Yerger, Section 51-16-14e, is a rig. Boisseau and associates' No. 1 Sullivan, Section 11-21-7e, is being reamed to the bottom at 2,545 feet. In Natchitoches Parish, S. E. Davidson and associates' No. 1 Guellat, Section 47-7-5, is a rig. Forrest, trustee's, No. 1 Ayers, Section 3-13-7, is drilling at 600 feet. Drillers are trying to kill a fresh water flow at 1,830 feet encountered at J. F. Palmer's No. 1 Edenborn, Section 4-11-6. Alden Oil Co.'s No. 1 Powell, Section 13-11-10, Red River Parish, is shut down at 240 feet for fuel. In Sabine Parish, L. M. Emlet's No. 5 H. L. Bowman, Section 9-7-12, is shut down at 3,920 feet. Arkansas Fuel Oil Co.'s No. 1 Reeves, Section 14-20-1e, Union Parish, is drilling in shale at 3,523 feet.

**Arkansas Operations—Union County**

Lisbon wound up the week with its usual number of completions but the wells for the most part were edge wells and new production dropped off. The 15 wells completed averaged 48 bbls. each. The largest well was a 115-bbl. producer and the smallest made 18 bbls. of oil. The combined production was 718 bbls.

Atlantic Oil Producing Co. completed three on the Andress "B" lease, Section 16-17-16. No. 4 pumped 300 bbls. from sand at 2,105-32 feet; No. 5 60 bbls. from 2,109-43 feet, and No. 6 40 bbls. from 2,124-59 feet. Atlantic's No. 8 Goodwin, Section 16-17-16, is making 60 bbls. naturally from sand at 2,113-47 feet. Humble Oil & Refining Co.'s No. 5 Goodwin,

(Continued on Page 150)

# NEW PAY FOUND AT 3,998 FEET IN BAISH WELL, LEA COUNTY, N. MEX.

By Special Correspondent

ARTESIA, N. Mex., June 12. — The Dome Oil Co.'s property in the Artesia Pool, consisting of 160 acres, on which are five producers, averaging 200 bbls. daily, has been sold to the Lackawanna Producing & Refining Co. of Scranton, Pa. This is considered one of the best pieces of property in the field.

Flynn, Welch & Yates have added two producers to their list of completions during the week. No. 39, SE Section 21-18-28, which was carried down as a deep test, was plugged back to the regular Artesia pay and is now on the pump, making 50 bbls. No. 43, NE Section 28-18-28, is also on production. No. 45, NE SE, Section 21-18-28, will be shot today.

A good showing of oil has been obtained on the east side of the field in the Wade & Bujac No. 1 on the Goodale permit, NW NW, Section 19-18-29, at 1,965 feet.

The west side of the field, however, is now attracting most of the attention, due to the recent good completions made by Hasenfuss & Donley and the Picher Oil & Gas Corp. The wells average approximately 50 bbls., with the pay sand running about 100 feet higher than the rest of the field. The Empire's test in Section 35-17-27 and the Swartz, Compton & Eaton, NE cor SW, Section 5-18-27, are believed to have excellent chances of making commercial producers.

Spraying considerable oil, the Maljamar Oil & Gas Corp.'s No. 1 Baish well, in Lea County, Section 21-17-32, picked up a new pay, which was encountered below a green shale at 3,998 feet. This pay is a soft gray lime, 6 feet in thickness, after which the bit passed into a hard white lime at 4,012 feet.

Drilling has been delayed, due to lightning which struck the end of the bleeder pipe during an electrical storm Tuesday. No estimate can be placed on the probable production of this well, the hole now standing 900 feet in fluid. The new production, which is light green in color, closely resembles the crude from the North Texas fields, and is of the same gravity as that of the Artesia Field and free from any sulphur content. The well will be drilled about 50 feet deeper and shot with 900 quarts of gelatin.

Interested visitors to the well were officials of the Prairie Oil & Gas Co. The party included Nelson K. Moody, president; Dana Kelsey, vice president and general manager; W. S. Fitzpatrick, chairman; W. F. Gates and George Coyle.

To the west of the Maljamar, the Skelly interests are building a road and moving in tools for their No. 1 test, NE NE, Section 22-17-31. In SE SE, Section 1-18-31, a location for a well has been made by Bruce Sullivan of the Sullivan Refineries and drilling will be started within 30 days.

The Texas Company has purchased the following acreage close to the Maljamar well: The S half NE and the N half SE, Section 9, the NW of Section 11, Township 17, Range 32, also the S half of Section 2 and the N half of Section 16, Township 18, Range 32.

**Eddy County Drilling**

Colorado Drilling Co.'s No. 1 Irvin, SE SE, Section 8-16-27, shut down; Compton No. 2, Mann permit, Section 3 18-27, no report; Cook-Ironsides No. 1, NE Section 1-20-29, rigging up with new No. 3 National rig; Decum Development Co.'s No. 1 Vandagriff, NE SE, Section 5-17-28, drilling below 2,075 feet; Dunn Oil Co.'s No. 1, NW Section 22-17-31, location; Empire Gas & Fuel Co., SE cor. SW SW, Section 35-17-27, setting 10-inch casing; Flynn, Welch & Yates' No. 39, SE Section 21-18-28, on production; No. 43, SE cor. NE, Section 28-18-28, on production; No. 45; NE SE, Section 21-18-28, preparing to shoot; Flynn, Welch & Yates' No. 4 Keyes, NW cor. Section 21-18-28, drilling below 1,200 feet; Flynn, Welch & Yates' No. 46, Section 28-18-28, drilling below 1,700 feet;

(Continued on Page 108)

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# New Dome in Chambers County, Tex.

## Supposed to Be Found 10 Miles South of South Liberty Pool and Same Distance East of Barber Hill

By P. L. McGreal
*Staff Correspondent, Gulf Coast Fields*

HOUSTON, Tex., June 12.—The past week has been rather quiet in the Coastal region, following several weeks of activity and an increase in new production. Wells completed during the week total 29, of which one was dry and five salt water holes. The new production was 2,465 bbls. Two gassers were developed, one at Markham and the other in the Refugio County Field. Two wells were bailing at the close of the week.

The Texas Company readjusted its schedule of prices during the week, classifying Coastal crudes into A and B grades, the same as other lines. The company never established a B grade, as did the other buyers. The new schedule posts A at $1.60 and B at $1.50. The lighter gravities are rated the same as north central Texas, listing as high as 40 degrees and above at $2.30. The other lines only grade to 35 gravity on Coastal crude, which is posted at $2.05. As a matter of fact but a very small percentage of the Coastal crude runs above 35 gravity so that the change in gravities affects very little oil.

Outside of the pools interest has been diverted to the new dome, or supposed new dome on the line of Liberty and Chambers Counties, 10 miles south of the South Liberty Pool and about the same distance east of Barber Hill. The discovery is credited to geophysical tests made by the Gulf Production Co., although the territory has been considered "suspicious" for years. The Gulf and Humble companies started a scramble for leases in which they were later joined by the Humphreys Corp., the Sun Oil Co. and other companies and individuals. It has been a long time in the history of the Coastal area since bonus prices for leases soared as they have around the new discovery. As high as $200 per acre has been paid in a few cases, which is remarkable when it is considered that bonus figures originally were around $1 per acre and furthermore no tests have yet been drilled to determine values. The largest block leased was the R. S. Sterling 1,600-acre tract, leased to the Humble Oil & Refining Co. at a fancy figure. Mr. Sterling organized the Humble Co. and was its president for many years, or until control was taken over by the Standard Oil Co. of New Jersey. Locations for tests have been made by both the Gulf and Humble companies.

### Salt Water at Spindletop

The new deep sand wells off the Spindletop Dome, especially those on the Gladys on the north side, are making increasing percentages of salt water. Yount-Lee Oil Co.'s No. 3 Gladys is flowing 600 bbls. of oil and 75 per cent water and sediment. No. 4 Gladys is making 1,350 bbls. of fluid, 9 per cent water and No. 5 is rigging to pump. O. Barbee's No. 1 Garrick, also on the north side, showed salt water at 1,125 feet. The Gulf Production Co.'s No. 186 Gladys, worked over, got salt water at 860 feet. The Unity Oil Co.'s No. 45 National, is pumping 80 bbls. at 932 feet. It is in the old section of the pool.

Nine deep tests are drilling or starting off the old dome. The Yount-Lee Oil Co.'s No. 6 McFadden, on the southeast side, is drilling around 2,500 feet. Same company is rigging No. 1 Davis, 220 feet southeast of No. 5 Gladys. The Gulf Production Co. is rigging No. 1 Weed, and the Sun Oil Co., No. 1 McLean. The Rio Bravo Oil Co.'s No. 1 McLean is rigging. The Seeven Oil Co. is starting No. 1 Trembly, B. Deutser No. 1 fee, and Hines and others, No. 1 Quinn.

As a result of the salt water encroaching in the deep section on the north, the daily average production fell off 4,100 bbls. during the week. The average for the week is placed at 3,400 bbls., compared with 12,000 bbls. three weeks ago.

### Southwest Fields

The estimated daily average gross for the Southwestern fields for the same period is 38,545 bbls., an increase of 690 bbls. over the estimate for last week.

The estimate for each field is as follows:

| Field— | Gross Barrels |
|---|---|
| Luling | 20,700 |
| Mirando | 9,475 |
| Somerset | 2,060 |
| Calliham | 135 |
| Rockdale-Minerva | 975 |
| Lockhart | 5,200 |
| Total | 38,545 |
| Grand total for week | 132,690 |
| Grand total, last week | 138,315 |
| Net decrease | 5,625 |

### Estimated Daily Average Gross Production

The estimated daily average gross production for the week ending June 12, in the Coastal pools, is placed at 94,145 bbls., a decrease of 6,315 bbls. compared with last week. The largest decline is at Spindletop, as has been mentioned.

Of the gross production, 81,145 bbls. are credited to the pools in south Texas and 13,000 bbls. to those in south Louisiana.

The following is the estimate for each district:

| District— | Gross Barrels |
|---|---|
| Boling | 2,100 |
| Batson | 1,440 |
| Big Creek | 1,000 |
| Blue Ridge | 825 |
| Barber Hill | 475 |
| Dayton | 60 |
| Damon Mound | 945 |
| Edgerly (La.) | 750 |
| Goose Creek | 10,200 |
| Humble | 4,400 |
| Hull | 19,910 |
| High Island | 225 |
| Jennings (La.) | 1,125 |
| Lockport (La.) | 4,350 |
| Markham | 75 |
| Orange | 10,425 |
| Orchard | 950 |
| Pierce Junction | 1,675 |
| Piedras Pintas | 90 |
| Spindletop | 3,400 |
| Saratoga | 1,460 |
| Sour Lake | 6,620 |
| South Liberty | 5,650 |
| Vinton (La.) | 6,700 |
| West Columbia | 9,100 |
| Welsh-Anse La Bute (La.) | 75 |
| *Miscellaneous | 120 |
| Total | 94,145 |

*Includes Nacogdoches, Washington and Kleberg Counties.

### Interest Around Lufkin

Reference has been made to interest in a presumed new dome south of Liberty. The region around Lufkin, Angelina County, is also attracting some attention. It is in east Texas and outside of the Saline Dome region, or at least presumably so. Last week, this review referred to geological work under way in Angelina, San Augustine and Tyler Counties. The Flannigan Drilling Co. is reported to have cored a saturated sand in a test within the north limits of Lufkin, at about 1,500 feet and scouts are now at the well. Jennings and associates developed a number of shallow wells that pumped from 3 to 8 bbls. at from 180 to 210 feet, east of Lufkin, some three years ago, but the development was never pushed. The wells have been standing idle for months.

Higher prices for crude is the one thing most needed to stimulate the search for oil in the Coastal section and in the inland counties. It is surprising to note the amount of territory that is open for exploration work in this country. Almost every county has some spot that is worthy of a test and some of them have several. These are locations where enough work has been done in the past to justify more, if conditions were ripe and almost all of them will pass geological inspection, especially by geologists who have had experience in the Coastal plains belt and for miles inland. Of late years the number of independent operators has been decreasing in the Gulf section and as a consequence wildcatting has declined. It is well known that it is the so-called independent who does most of the wildcatting. This is true in the Gulf region as in other sections of the United States.

During the past three years the bulk of wildcatting has been done by the Rycade Petroleum Corp., the Roxana Petroleum Corp. and recently the Yount-Lee Oil Co. of Sour Lake. The first named opened the Nash Dome on the line of Fort Bend and Brazoria Counties and now has a production of 1,000 bbls. per day there. The Roxana Petroleum Corp. is working on a dome in the southern part of Brazoria County on the Allen ranch and Clement State Prison farm. The Yount-Lee Oil Co. opened the deep sands off Spindletop and in the southwest part of the Sour Lake Pool. Recently, the Humphreys Corp. entered the Coastal country and has a new deep sand well at Sour Lake and is interested with the Bennett Production Co. in the well just found on the north side of the dome at Barber Hill, which is making 400 bbls. and located in territory never drilled before. Benedum & Trees are the latest to start wildcatting, rigging a test on the Kennedy land, southeast of the Humble Pool.

The Gulf and Humble companies maintain several rigs that are always searching for oil around some of the old and new domes and the Sun Oil Co. has been fairly active, but The Texas Company has retired temporarily. The Sinclair Oil & Gas Co. has done very little wildcatting during the past three or four years, but has confined its expenditures to the South Liberty and Boling Pools. The Rio Bravo Oil Co., a subsidiary of the Southern Pacific Railroad, is spreading out some and has developed production on the west side of the Pierce Junction Pool, and is starting at Spindletop. The company is doing wildcatting around saline uplifts in south Louisiana. The Pure Oil Co. is in the Gulf Coast, drilling tests at Sweet Lake in Cameron Parish, Louisiana.

### May Enter Gulf Coast

One reason for the decline in wildcat operations is the fact that so few executives of large corporations or big individuals and companies know anything about the Gulf Coast territory, with its saline domes and other conditions not met with in other producing sections of the United States. These are all mysteries to many. Therefore, they hesitate to enter this country. The oil itself has been classed as low gravity, considered fit only for making lubricating stocks and fuel until recently, when it was reclassified and graded according to gravity just as is the custom in other fields.

The reclassification of this oil, coupled with the wider geological knowledge and increased demand may result in due time in more of the big operating corporations entering the Gulf Coast region. A limited investigation is now being conducted by several Oklahoma operators, who may eventually decide to try their luck. One reason that deterred many old-timers has been eliminated. They honestly confessed ignorance of the rotary method of drilling. The use of this method is more

(Continued on Page 138)

# MEXICO REPORTS 45 COMPLETIONS; 16 PRODUCERS, 52,375 BARRELS

By George Blardone

TAMPICO, Mexico, June 11.—The past 10 days in Mexican fields witnessed the completion of no less than 45 wells, of which only 16 can be placed in the production column, the remainder being failures. The new production secured, potential head, totals 52,375 bbls.

The big end of the period under discussion belongs to the south fields. Three wells completed there total 45,400 bbls. They were: Mexican Eagle Oil Co.'s No. 43 Cerro Veijo, finished for 20,000 bbls. at 2,137 feet; Huasteca Petroleum Co.'s No. 12 Chapopote Nunez, already reported finished at a sub-sea level depth of 2,121 feet, rated 25,000 bbls., and Cosmos Oil Co.'s No. 131, Lot 16 Zacamixtle, finished for 400 bbls. at 2,240 feet.

There were two failures in the south fields. The more important was Cortez Oil Corp.'s No. 2, Lot 8 Cahuayotes, which lies to the southwest of the Quebrache sector. The drill was stopped in this well 3,125 feet in the San Felipe. The hole is dry. It was one of the few important wildcats yet on the drilling list. The other failure was Cia. Pet. Financiera's No. 29 Chiconcillo, which drilled into salt water at 2,405 feet.

### At Panuco

In the old Panuco Field the best well of the period was Transcontinental Petroleum Co.'s No. 6 Etienne, in the Las Piedras sector, which, as reported, came in good for 3,000 bbls. at the shallow depth of 1,500 feet. Transcontinental's No. 37 Barbarena is good for 150 bbls. at 1,675 feet. Mexican Gulf Oil Co.'s No. 24 Lopez finished for 1,500 bbls. at 1,565 feet. Cia. Pet. Capuchinas, in Lot 12 West Maguabes, scored two nice little wells. No. 6-A there coming in for 150 bbls. at 1,475 feet, and No. 10-A for 650 bbls. at the shallow depth of 1,375 feet. East Coast Oil Co. has two more small ones in Laguna de la Milpa, Nos. 62 and 63, each finished for 25 bbls. at 2,100 feet. English Oil Co.'s No. 5 Rivera is good for 275 bbls. at around 2,260 feet. Mexican Sinclair Petroleum Corp.'s No. 14-B Tananturo is good for 200 bbls. at 1,872 feet, and No. 16-A, same lease, is rated good for 50 bbls. at 1,860 feet.

Up at Ebano, Mexican Petroleum Co.'s No. 54 Chijol is rated 700 bbls. at 1,932 feet; and its No. 7 Silva is good for 200 bbls. at 2,200 feet.

Down in Caracol, Venable and others have 50 bbls. at 2,700 feet in No. 3.

The 27 dry holes, abandoned holes and salt water wells listed for the northern fields are generally distributed in the active drilling areas therein. The only wildcat of importance among these failures is the India Oil Co.'s No. 1 Rayon, just north of the Tamesi River, which has perforce quit at 1,820 feet, showing heavy oil and salt water. The formation is reported by one authority as San Felipe, and by another authority of equal experience as Tamasopa.

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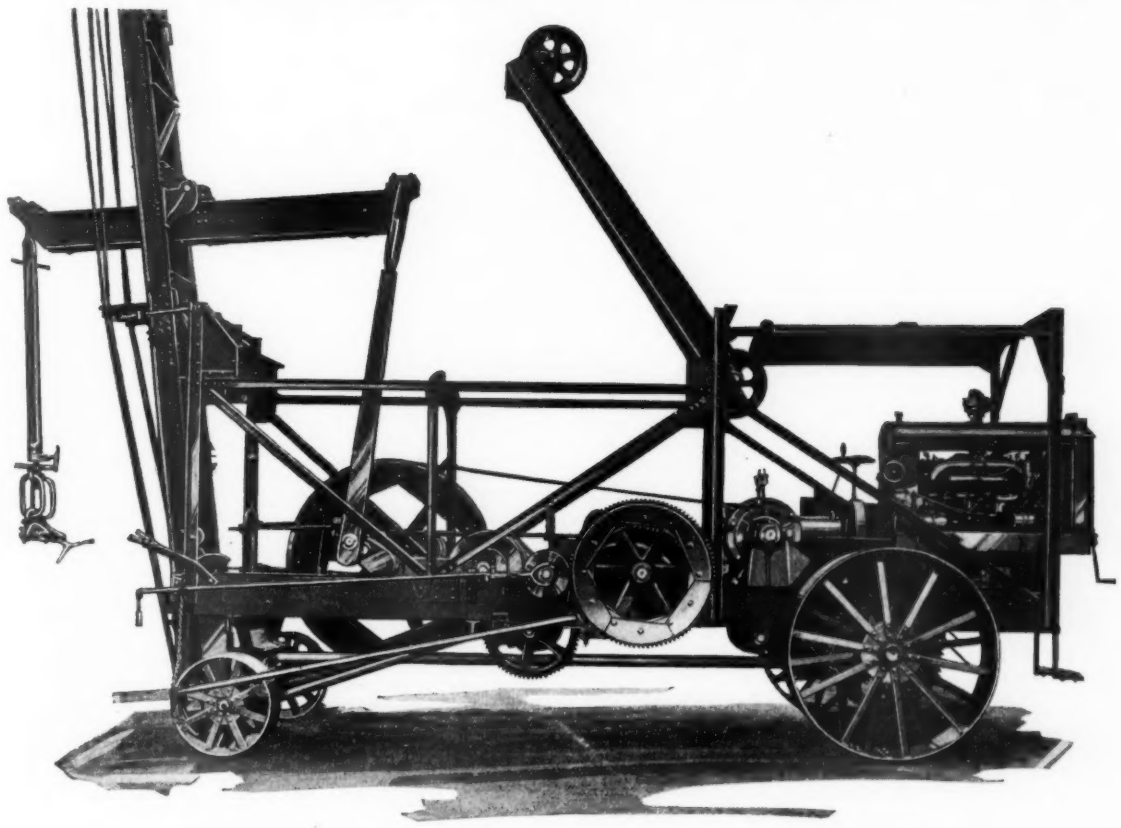

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# Long Beach Completions All Deep

## Largest Was 786 Bbls. But All Fairly Good Producers. An Even Dozen Deep Wells Drilled in That District

By L. P. Stockman
*Staff Correspondent, California Fields*

LOS ANGELES, Calif., June 12.—Deep drilling was responsible for the completion of all the wells finished in the Long Beach Field during the past week and it is interesting to note in this connection that all of them were fairly good producers. The largest well brought in was Featherstone & Preston's No. 9-A Cerritos, drilled to 4,850 feet and producing from an 80-foot penetration. The well, flowing through a ½-inch beam under a pressure of 185 pounds, showed an initial output of 786 bbls. of 21.9 gravity oil, the cut being less than 1 per cent. The Combs Trust's No. 3-3, drilled to 4,852 feet and finished with a 4½-inch oil string, showed a slightly smaller output, 693 bbls. of 21.9 gravity oil and, while the cut is still running around 5 per cent, it will probably show a further improvement after the well has been on production for a few days longer.

The Gem's No. 2 Cerritos just topped the 500-bbl. mark, the actual flow during the first 24 hours being 502 bbls. of 21.7 gravity oil from 4,828 feet. This well was finished with a 4½-inch liner, 80 feet of which was shop perforated, and is flowing through a ¾-inch orifice under a pressure of 385 pounds. The United Oil Co.'s deep sand completion during the current week was No. 1 Bixby American, drilled to 4,836 feet and finished with a 6¼-inch oil string and 4,605 feet of 2½-inch tubing. The initial tank gauge credited the well, which is flowing through a ½-inch bean under a pressure of 360 pounds, with 496 bbls. of 21.4 gravity oil cutting 6 per cent. Upon the completion of this new producer, the company immediately started preparations to redrill and deepen No. 1 Adams from 4,546 feet to the deep zone. It took Lacy-McLaughlin & Lacy nearly two weeks to bring in their No. 1 Cerritos and, although it did not seem to have any kick for the first several days, it has since built up to 380 bbls. of 21.4 gravity oil, this production coming from 4,848 feet.

The Julian Petroleum wound up the week with a 720-bbl. producer when No. 1 Bruce was finished at 4,842 feet. The oil, which is flowing through a ½-inch bean under a pressure of 310 pounds, tests 21.6 degrees and shows a cut of 3 per cent. No. 1 Hughes, which will probably be the company's next producer in this area, found the top of the deep sand at 4,760 feet and casing is at present being run in. S. C. Lewis of the Julian Petroleum Corp. reports his company is drilling four wells at present and that two more will be deepened during the coming week. This company has 27 wells at Long Beach, 3 producing from the deep sand and 18 producing from the upper zone, of which 12 are in a position to be deepened to the lower horizon whenever desirable. In addition to these 21 producers, the company is working on six new wells or deepening projects.

### Dozen Deep Wells

There has been an even dozen deep zone wells finished in the Long Beach extension up to and including the current weekly completions and, with but one exception, Wilshire's No. 1-C Los Cerritos, which was handicapped because of mechanical trouble, they have all shown a favorable initial production. The Julian Petroleum heads the list with three deep wells, No. 1 fee, which came in flowing 1,168 bbls.; No. 1 Chandler, making 738 bbls., and No. 1 Bruce, just finished doing 530 bbls. daily. The McKeon Oil Co. and the United have each finished two deep wells to date, although the former's completions were much more satisfactory. This company's No. 1 Cerritos registered an initial production of 700 bbls. daily upon completion, while No. 9 Cerritos started off flowing 895 bbls.

The United's No. 2 Taylor, brought in several weeks ago, was rated at 460 bbls. daily, while No. 1 Bixby American, just completed, started off flowing 496 bbls. George F. Getty's No. 16 Cerritos, brought in several weeks ago, was listed for completion in the deep zone as a 737-bbl. producer. The three remaining deep sand wells belonging to Featherstone & Preston, the Combs Trust and the Gem Oil Co. were finished this week and the production is listed above. The average initial daily production of the 12 wells finished in the deep zone up to the present was 654 bbls. and, while some have shown an appreciable drop, others have only registered a normal decline. The present daily average of these wells is 463 bbls.

Preparations are just being made to deepen nine more upper sand producers and it is quite likely some will be coming into production about the end of June as they have only about 300 feet to go. C. B. Colby, E. T. Edwards, George W. Johnson, E. L. Craigen, W. I. Lake, McKeon Oil Co., Frank Travers, Rainbow Petroleum and F. M. & S. Oil Co. are the operators who started deepening work during the past seven days. In addition to the wells controlled by these operators, there are at least 25 more on the way down. The Wilshire should break into the run column soon if the property being drilled is productive, as this company has five wells standing cemented just on top of the zone. Walter P. Temple failed to secure a satisfactory water shut off in his No. 2 Cerritos, a deep zone well drilled to 4,855 feet, and he has another week's work ahead, during which time a cement plug will be put on bottom.

Work will be undertaken within a short time on a pipeline system to be used for the disposal of waste oil and water, which has become quite a problem in the Long Beach Field, not only in the northwest extension but in the older section as well. Representatives of approximately 40 producing companies met yesterday afternoon and decided to install a complete system covering the entire field, to be financed by an assessment of $100 a well. This action has become necessary due to the former inadequate method of handling this waste, the operators in the northwest extension being obliged in many instances to carry this water and oil away in trucks.

### Inglewood

The Standard chalked up another completion on the Baldwin Cienega property in the Inglewood Field, when No. 46 was put on the beam at 2,100 feet. This well, plugged back from 2,155 feet and finished with a 6¼-inch oil string, started off pumping 142 bbls. of 16.4 gravity oil cutting 10 per cent. Comparatively little development work is being done in this field and, notwithstanding that only six new wells have been finished during the past 60 days, the field production has been quite stable. A check just made shows there are only 28 flowing wells in the field, compared with 168 pumpers, the daily average production of the former being 14,700 bbls. and of the latter 35,300 bbls. The flowing wells are averaging 525 bbls. each per day, while the pumpers are yielding 210 bbls. This is a rather high average for shallow production but it is not surprising in view of the fact that the average penetration in this field is somewhere around 800 feet.

The thickness of the producing horizon is perhaps the most important factor contributing to the present steady production and, because of the small number of flowing wells in proportion to the number pumping, it would not be at all surprising if this field maintained its present daily production of around 50,000 bbls. for some little time to come. The field's output is bound to settle, of course, but it is not believed the total daily production will drop below 45,000 bbls. during the next 60 or 90 days. Deep sand possibility is being discounted for the present as the companies operating in this field have shown a decided change and are wisely holding up work. There is no reason why this policy should not continue to be adhered to for the rest of this year, as the companies affected have plenty of production and delayed drilling will prove mutually advantageous.

### Rosecrans

The Barnsdall got away to a slow start at Rosecrans but the company's work during the past year or so has resulted in its becoming the most successful producer operating in that district. The recent completion of Nos. 10 and 11 on the O'Dea lease doing 860 bbls. and 1,730 bbls., respectively, will undoubtedly lead to additional work, especially as this oil is of a high grade testing around 41 degrees and bringing $2.74 per barrel. The company is building a rig for No. 13 O'Dea and has material on the ground for No. 14. The Union's No. 26 Howard Park, finished during the early part of the week, was only a comparatively small well, the initial output from 4,943 feet being 180 bbls. of clean 35.6 gravity oil. Nos. 10, 11, 15 and 20 on this lease, in which the Barnsdall has a production cut, are in the oil sand and one or two of them will probably be tanking oil in the near future.

### Torrance

The Chanslor-Canfield Midway Oil Co. is developing its holdings at Torrance in a systematic manner and, while it has been several months since a flowing well has been finished in this field, the company has been chalking up pumping wells quite regularly during this period. The latest completion is No. 39 Del Amo, a 120-bbl. pumper from an even 3,700 feet, the oil testing 17.6 degrees and showing a cut of 5 per cent. The Shell's No. 1-A March, originally finished at 3,904 feet, has been plugged back to 3,835 feet and, instead of producing a dirty oil, as it has been doing for some time, it is now pumping 52 bbls. of clean oil daily. The R. & D. Oil Co. is rigging up rotary equipment in No. 3 Craven and, although the first two wells on this property were only good for 75 bbls. each, this small production is not holding up development.

### Huntington Beach

Work is going ahead slowly in the newly opened town lot area at Huntington Beach but those in touch with the situation are of the opinion the present quietness is but the lull before a storm. This does not mean, of course, that any considerable amount of drilling will be undertaken but they are firmly of the opinion some 10 or 15 wells will be drilling within five or six weeks. The Superior has just started rig construction on No. 1 Jones, a short distance south of the Wilshire and Julian Petroleum companies' respective drillers in this area, and it is believed spud will be made within two weeks.

No. 1 Lambert of the Julian Petroleum in the newly opened section, is standing cemented at 600 feet, while the Wilshire is rotating ahead in its initial well at 1,200 feet. The Wilshire suggested that those interested in proving up this area could do so by contributing toward the drilling cost of its new well, but adjoining lease holders refused to consider this angle and the company has been forced to drill ahead on its own hook. The Julian Petroleum has just consummated a deal whereby it acquires the five Jackie Coogan wells of the White Behr Consolidated Oil Co. at Huntington for a consideration of $300,000. The wells just taken over have been yielding around 500 bbls. a day but they will be reconditioned in the near future in the hope of stimulating production.

### Fullerton

The Union's No. 1 Olinda, a wildcat in the Fullerton district, has just passed the 4,986-foot level and as the prevailing formation for the past several hundred feet has been a gray sand devoid of any showings of importance, the outlook is distinctly disappointing. No. 2 Olinda on the same lease is also in a gray sand, although it is over 1,000 feet shallower. The latest spud in this field was the Brea Canyon Oil Co.'s No. 39 and, although it was thought that the Fullerton Oil Co. would start drilling early in the week, spud has been delayed due to the fact that the preparatory work had not been completed. The Chanslor-Canfield Midway Oil Co.'s No. 96 Olinda has not yet picked up anything that looks like commercial production, although at 7,000 feet it is the deepest hole drilled to date in California with electric motor equipment. The company is finding some consolation, however, in demonstrating the

(Continued on Page 147)

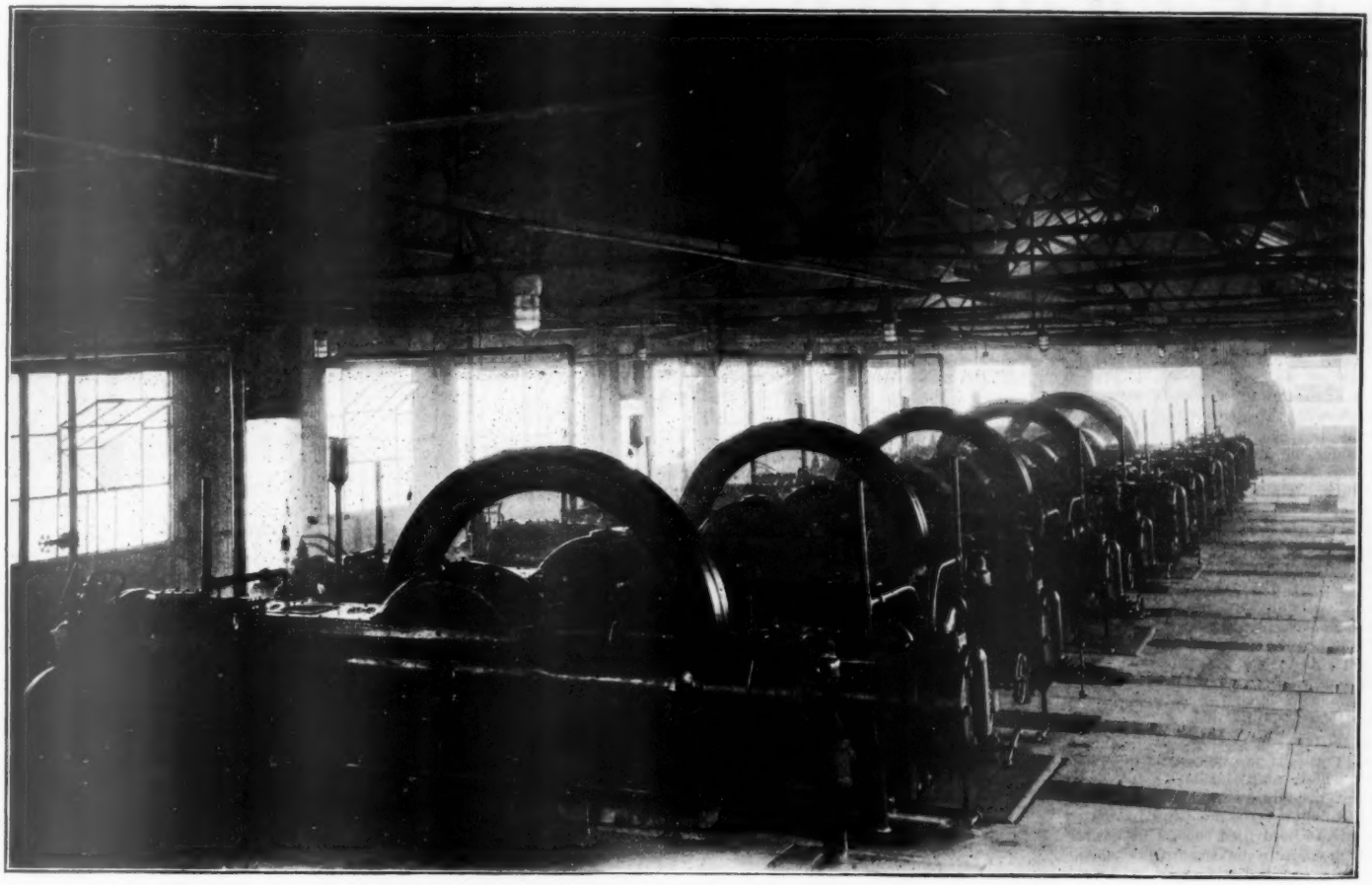
**TANKER SHIPMENTS FROM LOS ANGELES TO ATLANTIC AND GULF COAST PORTS**

| Commodity— | Total This week | Daily Average | Total Last week | Daily Average | This year To date | Same time Last year |
|---|---|---|---|---|---|---|
| Crude oil | 363,809 | 51,973 | 172,229 | 24,604 | 5,681,286 | 7,306,727 |
| Fuel and gas oil | 352,892 | 50,413 | .... | .... | 4,174,665 | 237,873 |
| Gasoline | 173,125 | 24,732 | 93,716 | 13,388 | 2,969,600 | 2,628,401 |
| Tops | ..... | ..... | ..... | ..... | 74,619 | 251,000 |
| Coastwise— | | | | | | |
| Crude oil | 679,012 | 97,002 | 755,644 | 107,949 | 11,173,803 | 13,059,189 |
| Fuel and gas oil | 280,859 | 40,122 | 360,741 | 51,534 | 4,060,466 | 5,087,296 |
| Gasoline | 178,864 | 25,552 | 112,684 | 16,098 | 3,341,833 | 1,968,328 |
| Kerosene | ..... | ..... | ..... | ..... | 166,870 | 216,978 |
| Tops | ..... | ..... | ..... | ..... | 390,446 | 85,986 |
| Exports— | | | | | | |
| Crude oil | ..... | ..... | 457,705 | 65,386 | 2,342,030 | 1,019,218 |
| Fuel and gas oil | 583,057 | 83,294 | 67,344 | 9,621 | 7,215,591 | 6,147,228 |
| Gasoline | 471,995 | 67,428 | 43,666 | 6,238 | 2,529,480 | 1,681,393 |
| Tops | ..... | ..... | ..... | ..... | ..... | 170,407 |
| Kerosene | ..... | ..... | ..... | ..... | 815,126 | 845,399 |

**TANKER SHIPMENTS FROM SAN FRANCISCO TO ATLANTIC, GULF COAST PORTS**

| | | | | | | |
|---|---|---|---|---|---|---|
| Fuel and gas oil | 73,010 | 10,430 | ..... | ..... | 514,370 | 86,092 |
| Gasoline | ..... | ..... | ..... | ..... | 592,094 | 488,423 |
| Tops | ..... | ..... | ..... | ..... | 229,775 | 624,175 |
| Lubricants | ..... | ..... | 63,059 | 9,008 | 217,147 | 159,968 |
| Coastwise— | | | | | | |
| Fuel and gas oil | 188,661 | 26,951 | .... | ..... | 2,192,162 | 1,599,800 |
| Gasoline | 101,149 | 14,450 | 28,142 | 4,020 | 1,748,123 | 1,160,606 |
| Kerosene | 2,618 | 374 | ..... | ..... | 186,567 | 119,037 |
| Exports— | | | | | | |
| Fuel and gas oil | ..... | ..... | ..... | ..... | 1,400,093 | 838,421 |
| Gasoline | ..... | ..... | 54,019 | 7,717 | 670,077 | 324,878 |
| Kerosene | 96,272 | 13,753 | 117,211 | 16,744 | 912,575 | 444,118 |
| Lubricants | ..... | ..... | ..... | ..... | ..... | 293,429 |

XUM



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# Cole Field Well 35 Barrels an Hour

## Cin-Tex Petroleum Co.'s Nos. 6 and 7 Benavides, Best Wells in That District, Now Flowing 400 and 350 Bbls.

By B. D. Stevenson
*Staff Correspondent, Southwest Texas Fields*

SAN ANTONIO, Tex., June 14.—Cin-Tex Petroleum Co.'s No. 7 Benavides, in the Cole Field in Duval County, came in flowing at the rate of 35 bbls. an hour. It beat the initial production of No. 6 to which it is a southwest offset by 5 bbls. an hour, but No. 6 later increased and No. 7 by the close of last week had dropped down to 350 bbls. a day. No. 6 is now flowing 400 bbls. a day. These two wells each flowed a steady stream with no showing of gas, while all the other wells in the field thus far have made considerable gas and sprayed oil, excepting on the east side, where they failed to flow till put on the pump. Expectation of oil men when the Cin-Tex discovery well came in that as locations were made to the east better oil production should be obtained seems not to have been borne out. Cin-Tex Nos. 6 and 7, the best wells in the field, are to the north and northeast of the discovery well. Thus far the oil production lying on the east side of the Cole gas field has not spread out to any extent and the bulk of the production is on the 20 acres out of Block 16 of Section 10, the 20 acres belonging to the Cin-Tex Petroleum Co. However, there is a territory to the northeast which many believe will develop some production and extend the area of the field, and some tests in that direction are to be drilled soon. Cin-Tex's No. 5, which came in making considerable gas and spraying a little oil, has been deepened to 1,808 feet and was brought in again the past week making gas but a little more oil. Total depth of No. 6 is 1,803 feet, and of No. 7 is 1,804 feet. Cole Petroleum Co has spudded in No. 26, which is a northwest offset to the Cin-Tex Petroleum Co.'s No. 6.

**Sell Bruni Tracts**

Wheatley and others have sold the east half of Block 13 in the Bruni tracts in Webb County amounting to 80 acres, with one producing well, to the Lewis Oil Corp. and the National Refining Co. for $100.000, part cash and part oil, and the additional assumption of the remainder of $16,000 which Wheatley and others had agreed to pay for the lease from the oil produced. The well, which resulted in extending the field a mile to the southeast, made an average of 110 bbls. daily on a 30 day test.

Six wells in the Aviator extension in the Bruni tracts, Webb County, completed last week added 2,325 bbls. flush production to the field. The Cin-Tex No. 7 in the Cole Field came in as stated, making 35 bbls. an hour natural flow, and by the end of the week was making 350 bbls. a day. Simms No. 4 and Magnolia No. 4, each in the Randado Field, made 200 bbls. each on the pump, and Kitselman & St. Albans' No. 37 and Kitselman-St. Albans-Weber's No. 2, both in the Holbien ranch in the Henne, Winch & Fariss Field, came in estimated at 150 bbls. each, making a total of 4,375 bbls. daily of initial flush production completed in the Mirando Field in 11 wells. One gas well, the Associated No. 2 in the Henne, Winch & Fariss Field, added 50,000,000 feet of gas; Killam-Slocum in the Cole Field added another 50,000,000; Simms No. 3 Bruni, Block 10, Section 835, came in making 10,000,000 feet, and the J. H. Winch well in the Carolina Texas Field came in making 20,000,000 feet, a total of 130,000,000 feet from four wells.

Of the oil well completions in the Aviators Field the Staley-Wynne No. 4 is making 75 bbls. on the pump and Nos. 5 and 6 each swabbed 400 bbls. Gibson Oil Corp.'s No. 1 "A" swabbed 500 bbls. and No. 4 swabbed 400 bbls; Ball-Kennedy's No. 2 on Block 13 came in swabbing 600 bbls.

**Bruni Extension Fails**

Associated Oil Co's No. 1 Bruni, which looked like it would extend the field some distance south in the Bruni tracts as reported last week, is this week a failure. The core looked good but it failed to make more than a small amount of oil.

Humble Oil & Refining Co.'s No. 5 Walsh, 450 feet southeast of its discovery well on the Piedras Pintas salt dome at Noleda in Duval County, which has tested several sands without success, is whipstocking to make a test in the first good show encountered in a sand at 3.300 feet and which is cased off in the lower tests.

Humble Oil & Refining Co. has teams and wagons assembled at Benavides in Duval County waiting for the first shipments of pipe for its line from the Mirando Field to the Gulf Coast at Ingleside across the bay from Corpus Christi.

**Randado Field**

Magnolia Petroleum company will lay a 6-inch line from its tank farm at Oilton in Webb county to the Randado Field in Jim Hogg County, a distance of about 25 miles. Magnolia already is running about 4.500 barrels of oil a day. Humble also has a 4-inch line in operation to the new field. With 20 rigs running or on the ground the field will soon be drilled up in the estimation of operators for one rig will complete about two wells a month if not more.

Wm. F. Morgan's No. 1 in the northwest corner of block 14 of survey 291 which last week looked as though it might make a gas well when it was drilled in has proven one of the best oil wells in the field and gauged 920 barrels of oil in 24 hours through one and one-quarter inch choker. It was the best completion the past week. Black, Pearson & Hudson completed their No. 1 in the southeast corner of block 13, and it is going on the pump. No. 2 was completed swabbing 1,000 barrels a day and No. 3 is ready to come in, Wheelock & Collins in block 21 completed their No. 1, which showed considerable gas and a little oil. It is pretty close to the Magnolia's gas well on the west. No. 2 is being brought in at this time. It is a location east of No. 1 and looks like a good oil well. Magnolia Petroleum Company's No. 5 Merchant State Bank in survey 267 is a 30,000,000 foot gasser at 1,247 feet. It is one location north of the No. 4 which was also a gasser. Magnolia's No. 4 Palacious, block 7, survey 291, is drilling below 800 feet and will complete this week. Simms Oil Company's No. 1 Weil is a derrick on block 16 of survey 81. adjoining survey 291 on the north. Simms No. 4 Palacious is in on the south line of its block (northwest one-fourth of survey 291). No. 5 is drilling at about 800 feet. Houston Gulf Gas Company's No. 6 Palacious made a 20,000,000 foot gasser on block 20 of survey 291. No. 7 on block 11 went on the pump making about 200 barrels of oil and No. 8 on block 11 made about the same amount. Wm. F. Morgan's No. 2, located in the southeast corner of block 11 has set casing at 1,256 feet; No. 4, located on block 14 and 150 feet south of the north line and 450 feet east of the west line has spudded in and the No. 3, located one location east of No. 4 is drilling at about 800 feet and due for completion this week. No. 5, located in the southeast corner of block 20, survey 291 is rigging up. American Well & Prospecting Co.'s No. 3 Palacious is pumping 30 barrels of fluid, 12 per cent water. It is on the east edge of what may prove the edge of the field. Casing was set at 1.244 feet and total depth is 1,252 feet. Fred Allison is setting up the rig for the first of his tests on a contract to drill 25 wells for the American Well & Prospecting Co.

**Henne, Winch & Fariss Field.**

Kitselman & St. Albans in the Henne, Winch & Fariss Field have the derrick up for No. 4 (T. P.) Holbien on block 15 of section 12; are drilling at 1,400 feet in the No. 2 Holbien on block 1 of section 16; are moving on the rig to drill No. 3 Holbien for Weber, on block 1, section 16; are drilling at 1800 feet in No. 36 Holbien. block 14, section 11, in a sand at 2,125 feet, the producing horizon, in No. 37 Holbien with casing set at 2,120 feet and ready to drill in. Locations have been made for No. 38 on block 8, section 16, and No. 29, on block 40, of section 11. Associated Oil Company's No. 2. Lopez on block 21 of Share No. 1 of the Las Animas grant, a little north of the Kitselman & St. Albans block has a sand at 2,136-38 feet and has set casing

Magnolia Petroleum Co. is drilling at 1,400 feet in No. 9-B Martinez in the proven territory of the Henne, Winch & Fariss field, the first new drilling Magnolia has done in the proven district for some time. Its No. 13 Martinez on survey 256 which has been standing for some weeks at 1,976 feet has been completed and is a 30,000,000 foot gas well. M. E. Weber's No. 2 Holbien on section 15, has casing set at 2,131 feet.

**Jim Hogg County Wildcats.**

Murchison & Fain's No. 1 Yeager in survey 452 has successfully completed the fishing job at 2,286 feet and is drilling at 2.300 feet Benedum & Trees' No. 1 Allen is drilling at 3,330 feet, No. 2 Allen is drilling at 146 feet and No. 3 Allen at 2,780 feet. Simms Oil Co.'s No. 1 Leyendecker is coring at 1,198 feet. L. M. Holden who has been drilling with a cable rig six miles east of Hebronville on the W. W. Jones land at a total depth of 2,896 feet with a showing of oil but unable to complete a well has let a contract to T. J. Wren for a rotary rig test one location removed from the first. Derrick is up and the rig is moving in.

**Webb County.**

George M. Ball's No. 2 on block 13, located 150 feet from the north and west lines of the lease is on the sand at 1.700 feet and ready to complete. The north half of the east half of block 13 is being operated by Ball and the half interest in the south half of the east half was sold to Murchison, instead of the reverse as previously reported. Ball's No. 3, located 1,070 feet from the north and 150 feet from the west line of the east half of 13 is rigging up, the location being in the southwest corner of the north half of the east half of 13. Murchison & Fain are rigging up in the southwest corner of the south half of the east half of 13 which will offset the first well of the Ruthada Oil Co. Simms Oil Co.'s No. 3 Bruni is on the sand at 1,668 feet with total depth of the hole at 1,703 feet and is ready to be brought in. It is on block 10 of survey 835, off to the west a quarter of a mile from the Ball well on the west half of block 45. Kirkpatrick-Lucas have spudded in on one of the Puig tracts. O. W. Killam is drilling at 2,702 feet on block 7 of survey 835, a little north of the Simms well on block 10.

Crown Central has a derrick up and is moving in for a deep test on lot 56, survey 606, of the Garcia land off to the north of the Aviator field. The derrick is 112 foot and the rig is moving in. This is in the proven area of the Los Ojuelos tracts and will go to 3,500 feet or deeper. Crown Central's No. 8 Bruni in the southwest corner of the east half of block 16 of the Bruni tracts, an offset on the north of a good well by the Sun Oil Company on block 45, is completed and is estimated at 25 barrels a day. Total depth is 1,702 feet. Crown Central's No. 9 on the west half of block 43 and in the northeast corner of the half block came in at 1726 feet swabbing about 400 barrels a day. Crown Central No. 6-A Burni, on block 14, is drilling below 1,200 feet. Crown Central, Staley & Wynne No. 2-B Bruni has spudded

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# DEEPENING FOR CONCLUSIVE TEST OF LOWER HORIZONS IN WAINWRIGHT

By Victor Lauriston
*Staff Correspondent, Canadian Fields*

CHATHAM, Ont., June 12.—In the Irma-Wainwright Field east of Edmonton, Irma Oil Development Co.'s well, LSD 16, Section 28-45-9w4, which recently got a fair commercial gas production at 1,025 feet, is being deepened for a conclusive test of the lower horizons. The well is being completed by the Edmonton-Wainwright Oils, Ltd., which earlier in the year took over the unfinished test in order to carry it to the gas sand. The gas sand which is usually encountered around 1,775 to 1,900 feet in the Wainwright section of the field, was at this point found unexpectedly high, at 1,025 feet. The test is now drilling around 1,250 feet.

In the Wainwright Field, Emerald Oils, Ltd., LSD 8, Section 30-45-6w4, is reported at 1,550 feet at the end of the first week's drilling, which is claimed to constitute a drilling record for Canada. Pat and Hugh Adams and Frank Stevens are in charge of the rotary outfit which is drilling continuously with three tours. The test is expected to get the oil sand around 2,100 feet with another week's drilling. British Petroleums' No. 5, LSD 4, Section 31-45-6w4, is rigging up. Britannia Oils, Ltd., has a location in LSD 5, Section 29-45 6w4. Wainwright Dome Oils, Ltd., LSD 7, Section 31-45-6w4, has a rig up. Shamrock Oils, Ltd., has spotted a test in Section 8-46-6w4.

Imperial Oil, Ltd., is drilling steadily on two tests. In the southern foothills, Imperial Oil, Ltd.'s Rice Creek test, Section 4-14-2w5, is drilling at 4,384 feet. In the Jumping Pound district 25 miles west of Calgary, Imperial Oil, Ltd.'s Bow River No. 1 is at 2,432 feet and running 12½-inch casing. In the Border Field,

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# Get 5,000 Bbl. Well in First Wall Creek

## Midwest's Find, However, Thought to Be a Freak. Sunburst Is Taxing Pipelines; On Proration Basis

By Frank B. Taylor
*Staff Correspondent, Rocky Mountain Area*

CASPER, Wyo., June 12.—The Midwest Refining Co. brought in a first Wall Creek sand well in the Salt Creek Field that started off at 5,000 bbls. The location is on Section 26-40-79, in the north central part of the field, on leases owned by the Wyoming Associated Oil Co. The top of sand was found at 975 feet and the hole was drilled to 1,008 feet. The size of the well came as a surprise as this part of the field has been producing only nominal first sand wells and the present strike was not expected to be out of the ordinary. It is considered that the big well results from a faulted space in the sand where the original pressure in the field was being held in a pocket and that it did not have any chance to migrate to other wells drilled nearby.

It is not expected that the big well will cause any more drilling on the outside of the Midwest leases, as the territory has been pretty well drilled over and the subsurface geology pretty well known. The strike is regarded as a freak of good luck and while it is possible that other like places exist in the field, finding them would be a matter of guesswork.

The Illinois Pipe Line Co. and the Argo Oil Co. have been making extensive repairs to the Pilot Butte Field pipeline. This line is about 30 miles long and connects the Pilot Butte Field with the railroad at Riverton. The alkali had eaten the pipe until extensive repairs were required to put it in good shape. This has been done and the field is expected to go on production again next week. The wells have been shut down during the repair period.

The Zola Oil Co., a firm from Washington State, is drilling a wildcat at Crooks Gap, in the Ferris Mountains, close to the north side of the Red Desert. The objective of the well is the Dakota and Lakota sands expected about 3,525 feet and the hole is now at 3,492 feet. This well is so far removed from any development that should it find production in commercial quantities, the territory would be virgin and open a new area entirely.

**Sunburst Production**

The oil production of the Sunburst Field for the past few weeks has been a matter of question. The Illinois Pipe Line Co. is running all the oil it can handle as fast as the storage is emptied to make room for more. The field is reported as being able to send out 30,000 bbls. daily if there was room for the oil. During the past week the Illinois Pipe Line Co. ran as high as 36,000 bbls. in one day, but the next day the company only ran 14,500 bbls. because there was no room for the crude

The pipeline company starts running the crude as soon as there is any room in the tanks and notifies producers how much they can send through the lines. The new line from the central part of the field to Shelby is started and this will relieve the situation largely, but until the new line is completed and tankage placed at Shelby, the production of the field will depend upon the storage available and the amount of crude shipped away. The prorata order is in effect and will continues until the conjection is over.

The Illinois Pipe Line Co. will place 10 new 80,000-bbl. tanks at Shelby to store oil from the Sunburst Field when the new pipe line is completed. During the past week, the Sunburst Field completed 13 new producers and there are 12 new wells starting now.

The Ferdig Oil Co. on Section 35-35-2, found a dry hole and drilled to 1,500 feet before abandoning and plugging. On Section 4-34-2, the Bistate Oil Co. has a producer good for 50 bbls. in the Ellis sand at 1,494 feet and on Section 31-35-1, the Dakota Montana Oil Co. found a 75-bbl. well in the Ellis sand at 1,497 feet. On Section 1-34-2, the Disbury Syndicate has a duster in the Ellis sand and abandoned the hole at 1,475 feet. The California Co., on Section 26-35-2, found showings for small producers in the Sunburst and a stray sand and also in the Ellis sand; the hole went into water and is now being plugged back and an effort will be made to produce all the shows to make a well. The well is estimated at 20 bbls. if the water can be controlled.

The Kewanee Oil Co., on Section 32-35-1, found the Ellis sand at 1,490 feet and some oil, but after drilling to 1,547 feet it was decided to abandon and plug The Homestake Oil Co. brought in the largest well of the week on Section 36 35-2 in the Ellis sand at 1,425 feet, it started off at 2,000 bbls. On Section 13-34-2, the Liberty Oil Co. has a producer good for 100 bbls. in the Ellis sand at 1,385 feet. The Mid-Northern Oil Co. has a dry hole on Section 9-34-2 in the Ellis sand and is plugging. O'Neil Brothers found a good producer on Section 27-35-2 in the Ellis sand at 1,658 feet that made 900 bbls. The Dominion Oils, Ltd., drilled a dry hole on Section 25-35-2 through the Ellis to a total depth of 1,480 feet and plugged. The Fulton Oil Co., on Section 31-35-1, has a producer good for 150 bbls. in the Ellis sand at 1,450 feet. The Ferdig Oil Co. has a dry hole on Section 35-35-2, drilling to 1,500 feet and plugging.

The Homestake Oil Co. will build one new 80,000-bbl. tank at Sunburst and the Rice and Fulton companies will place two more of the same size to hold crude that cannot be taken care of by the pipelines at present.

**Canadian Competition**

The Dominion Government of Canada has exploded a bomb among the oil operators at Sunburst Field. A grant has been made to the Canadian Oil & Refining Co. to lay a pipe line from the Rogers gas field about 30 miles from Coutts, to a point on the boundary and the Southam interests have already advanced the money for drilling another well.

It is proposed by the Canadians interested to lay a gas line to Great Falls and also export gasoline for the trade in Montana. The one well has a shut-in production of 80,000,000 feet daily and an estimated production of naphtha of 200 bbls. This naphtha can be made into gasoline and sold at a lower price than the skimming plants at Sunburst and other points in northern Montana can make it from crude oil at the present low price of Sunburst crude. The owners of skimming plants and small refineries who are operating on crude from the Sunburst Field see trouble ahead when the Canadians start to sell their gas and gasoline on the south side of the national boundary.

**Cat Creek Field**

The Cat Creek Field is gradually dropping in production, the production for the month of May was 2,000 bbls. under the April figures and the operators have small hopes of an extension of any importance that would bring the field back. It is recognized that the field will be producing for many years to come, but the area has been defined and it appears as though the field has passed its high point in production.

The Ohio Oil Co., Mid-Northern Oil Co., Ferdig interests, Rice Oil Co., and other leading firms in Sunburst have taken leases in Township 34-1, southeast of all production at Sunburst and will drill wells this season to see if there is to be any further extension of the Sunburst Field in that direction.

The Mosher Syndicate is drilling a wildcat on the Emigrant Gap anticline in Natrona County, Wyoming, about 12 miles east of Casper, Section 30-34-81. Several showings of oil and gas have been found, the Sundance sand is the next sand expected about 1,800 feet and the hole is now at 650 feet.

The Texas Company's big gas well in the Rangeley Field was fired by lightning and is still burning. This well is estimated at 80,000,000 feet and the fire and pressure has blown off the controls so the well is now free with the flames going into the air 200 feet.

**New Mexico**

While southern New Mexico is being developed around Artesia and some wildcatting is active in other parts, the northern part of the State is being examined carefully for more structures like the Rattlesnake, Hogback and Table Mesa Domes. This work is being done rather quietly and already large blocks of leases have been taken up by different firms and individuals.

Including the producing fields, some 25 new structures are now known in northern New Mexico, most of which have never been tested. The completion of the Rattlesnake to Gallup pipeline by the Continental Oil Co. has opened a new avenue of transportation for oil to the operators and is expected to stimulate drilling on the wildcat structures. This oil found in the northern part of the State is of such light gravity that its shipment through a pipeline is an easy matter compared to the heavier oil from other fields. Smaller pipe can be used and the Continental's line, though nearly 100 miles in length, is only 4-inch. This means a considerable economy in first cost.

Among the large holders of leases in the northern part of New Mexico, Paul S. Ache, of Denver, probably is the largest individual operator interested. Mr. Ache is a well known oil man, originally from the Pennsylvania fields, and he has checkerboarded leases in San Juan and Rio Arriba Counties, from the south to the north lines and covering several structures already surveyed, besides others not yet defined. On the El Huerfano Dome in east central San Juan County, Mr. Ache has practically the whole structure covered and this dome is expected to be a larger field than either

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# OPERATIONS IN VENEZUELA FIELD; INCREASED PRODUCTION EFFICIENCY

By Alfred F. Smith
*Special Correspondent*

MARACAIBO, Venezuela, June 1.—In the La Rosa-Ambrosio Field Venezuela Oil Concessions, due to recent completions and increased production efficiency, is probably producing 30,000 bbls. daily. N. O. Watson, who while in the employ of the Lago, figured in the Gulf and the V. O. C. line fight along the Superior lease, is here to take charge of V. O. C. field operations in the La Rosa-Ambrosio Field.

Lago corporation made a good completion in its No. 60, which came in May 8 for 3,000 bbls. Lago's production fell off to around an estimated 8,000 bbls., but is now back to about 14,000.

Gulf company's production is holding up fairly well at around 14,500 bbls. The active rigs on May 9 were as below:

No. 13 Superior, foundations; No. 19-A Superior, rebuilding derrick; No. 25 Superior, building rig; No. 27 Superior, rigging up; No. 29 Superior, reaming to set liner, due in at any time; No. 30 Superior, drilling at 2,152 feet; No. 31 Superior, rigging up; No. 32 Superior, standing cemented at 2,215 feet; No. 33 Superior, drilling at 1,512 feet; No. 34 Superior, drilling at 228 feet; No. 35 Superior, rigging up; No. 36 Superior, location; No. 37 Superior, building foundations; No. 8 Michigan, reaming at 2,294 feet; No. 4 Rodriguez, temporarily abandoned; No. 7 Rodriguez, sidetracking liner at 2,393 feet; No. 8 Rodriguez, drilling at 122 feet; No. 10 Rodriguez, drilling at 1,455 feet; No. 12 Rodriguez, drilling at 1,144 feet.

El Mene production has undoubtedly increased, probably to about 8,300 bbls. The railroad is completed to Kil. 42. The wildcat at La Ceiba is at 2,215 feet, with a show at 2,180 feet.

**Start on New Terminal**

Active work has started on the Standard Oil of Venezuela terminal at Punta Lleva, across the lake from Maracaibo. A very complete headquarters camp will be built, including residences, offices, warehouses, hospital, etc. Albert Hartman, chief construction engineer of the Standard, will be in charge.

On May 1 at 8 o'clock in the evening, W. G. Smith, of Parkersburg, W. Va., a driller in the employ of the Standard of Venezuela, was shot in the shoulder by an arrow delivered from the hand of a savage Motillone Indian. The arrow penetrated a distance of 6 inches, piercing the lung, and after lingering five days the unfortunate man died. His body was brought to Maracaibo, traveling 120 miles by canoe and 75 miles by lake boat, and is being shipped to the States. This happened at the Standard wildcat Pebiy, also known as Buena Esperanza, in the District of Colon, near the Colombian border. The Indians have killed and wounded a number of native employes of the oil companies, but this is the first American casualty.

Henry Stevens Lyne, a geologist in the employ of the Standard Oil of Venezuela, has just been discharged from the hospital after recovering from blackwater fever. Only two other cases of blackwater have been reported in the Maracaibo basin, both resulting in death. One case was that of a Venezuelan and the other a Frenchman, an escaped convict from Cayenne. In each case there had been previous weakening from malaria.

A new Gulf line-up transfers G. H. Werrell, for some time superintendent of production of the La Rosa-Cabimas-Ambrosio Field, to be in charge of the Gulf wildcat drilling in the District of Miranda. Theodore Nabors, well known to

(Continued on Page 126)

XUM

# *Announcement—*

**The rapid increase in the sales of the Merco Nordstrom lubricated plug valves evidences a growing conviction that the oldest known type of valve, namely, a plug cock, is also the best if a proper film of lubricant is maintained between the seating surfaces of the plug and body.**

**Patents suggesting lubricated plug cocks have appeared from time to time during the past twenty-five years or more, but none of these suggestions was successful, because none of them embodied means for separating and sealing the seating surfaces by high pressure lubrication.**

**Nordstrom was the first to discover and apply the principle upon which the successful lubrication of plug cocks depends; his fundamental patent (U.S. Reissue No. 14,516) relates to two distinct improvements in plug valves, namely:—**

**First. Means for introducing lubricant under high pressure in such a way as to separate the bearing surfaces and distribute lubricant evenly over them.**

**Second. Means for resiliently holding the plug in a position slightly separated from its seat so that an appreciably thick film of lubricant can be maintained between them at all times.**

**The second construction is suitable chiefly for comparatively low pressure work, such as gas distribution. But the first improvement — that is, the separation and sealing of the seating surfaces by forcing lubricant between them—is applicable to all types of service.**

**We hold that any plug valve in which the seating surfaces may be separated or sealed by high pressure lubrication is an appropriation of Nordstrom's invention and infringes this patent, and we know of no other means of introducing and maintaining a proper film of lubricant between the seating surfaces. The wide and increasing use of the Merco Nordstrom lubricated plug valve renders necessary the above statement in order that the users of these valves and other manufacturers may clearly understand our position.**

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# Merco Nordstrom
# PLUG VALVES

# Fifty Barrel Well in Kentucky Gas Area

## Swope Pool Reports the Largest Well in Owensboro District for Some Time. Dunville Wildcat Attracts Operators

By Whit
*Staff Correspondent, Kentucky-Tennessee*

LEXINGTON, Ky., June 14. — The completion of a 50-bbl. producer on the S. C. Allen lease, in the Hueyville Field of Floyd-Knott Counties, in the eastern Kentucky division, is in a way the most important find for some time in that portion of the state, according to its location, which should bring about a more active development for oil in that area, and which was drilling for gas to be utilized in a carbon black plant.

The Owensboro district in the western Kentucky division is credited with the largest find for the week, although the exact production of the well is not reported as final. It is No. 1 on the Joe Bob Ellis lease, south of the railroad in the Swope Pool. By some of the operators this well shows for from 150 to 200 bbls., flowing its oil, while well-versed operators pronounce it a 15-bbl. well, which means after being thoroughly settled. It is said to be the best found yet in the Owensboro district. Another well in the same district is reported at 35 bbls. settled, in No. 5 on the Laura Mercer lease.

In the North Weir Field of Lawrence-Johnson Counties, District 22-A, a 20-bbl. producer was brought in on the Sanford Lyons farm, from the Weir sand.

The finding of both oil and gas in small quantities in the second Sunnybrook sand in a wildcat drilling by Irwin, Anschutz and others on the Ben Russell farm, on Goose Creek, near Dunville, in Casey County, may mean the opening of a new producing area for the Blue Grass State. For years there has been talk of Casey County, but very little drilling has been done there, and what was done was not located geologically but in a haphazard way. At last accounts the well had reached a depth of 590 feet and had not passed through the second Sunnybrook sand, there being several feet yet to drill. Should the well prove a commercial one considerable work will be done, as the owners of the well have a large block of leases. The Russell farm test is reported to be located on a well defined structure located not more than one-half mile from the Casey-Adair County line.

### Week's Work

During the week a total of 28 completions were reported from the Kentucky-Tennessee Fields, 21 being oil wells with a flush of 250 bbls. and 7 dry holes. This is an increase from the previous week's figures of 3 completions, 1 additional oil well, 70 bbls. more flush production, while in dry holes the increase was 2. These wells were distributed among the various counties as follows:

| | Comp. | Prod. Wells | Prod. | Dry |
|---|---|---|---|---|
| Owensboro district | 9 | 8 | 134 | 1 |
| Barren | 6 | 3 | 16 | 3 |
| Lawrence-Johnson | 3 | 3 | 35 | 0 |
| Morgan | 3 | 3 | 5 | 0 |
| Allen | 2 | 2 | 5 | 0 |
| Cumberland-Monroe | 2 | 0 | 0 | 2 |
| Floyd | 1 | 1 | 50 | 0 |
| Wolfe | 1 | 1 | 5 | 0 |
| Tennessee | 1 | 0 | 0 | 1 |
| Total | 28 | 21 | 250 | 7 |
| Last week | 25 | 20 | 180 | 5 |
| Difference | 3 | 1 | 70 | 2 |

### Eastern Division

The bringing in of a 50-bbl. well in the Beaver Creek area of Floyd-Knott Counties by the Eastern Carbon Black Co., in a test on the S. C. Allen farm in District 21, is somewhat of a surprise as the well was drilling for gas. The oil means much for the territory in which it was drilled and should bring about a more active drilling campaign, for the gas companies that control a large part of the leased territory do not object to getting commercial oil wells as well as gas wells, as pipeline connection to handle oil is already in Floyd County, the crude being handled by the Cumberland Pipe Line Co., which covers the eastern half of the state with a network of pipelines.

Word comes from the southeastern part of the state that the Standard Oil Co. of Kentucky has reached close to a depth of 2,000 feet in its test on Confluence Creek, in Laurel County, while the Foreman Lumber Co. is down about the same depth in its test on Stinking Creek, in Knox County.

A pickup is noticeable through the eastern division in new development in almost all the old producing counties, especially in Lawrence-Johnson, Magoffin, Morgan, Estill, Wolfe, Lee-Owsley, Powell, Wayne and other counties, and the next few weeks should bring forth a larger list of new completions.

In the Ophir Field, District 30, in Morgan County, Phillips & Yough have drilled in their Nos. 1, 2 and 3 on the Bracken heirs lease, with a production of 2, 2 and 1 bbl. respectively. These wells are small and the oil found at shallow depths, but they maintain their original output for a long period.

In the North Weir Field of Lawrence-Johnson Counties, the Swiss Oil Corp.'s No. 30 on the Sanford Lyon farm is a 20-bbl. pumper. In District 32 the same company's Nos. 41 and 42 P. P. Holbrook farm pumped 10 and 5 bbls. respectively. These wells also show wonderful staying qualities and do not decline rapidly as is the case in some of the fields.

The Petroleum Exploration Co.'s No. 2 on the Spencer heirs lease, near Lecco, in Wolfe County, and upon what is known as the "Big Lease," is a 5-bbl. pumper.

The Swiss Oil Corp. is drilling No. 10 on the R. N. Sparks No. 2 farm, in the North Weir Field of Lawrence Johnson Counties and in District 22, as well as No. 11 on the Caney Sparks farm. Same company is drilling No. 14 Martha Kelley, in District 22-A, while in District 33 its No. 19 George Evans farm is drilling.

The Petroleum Exploration Co. is drilling its No. 13 on the Miller-Prewitt-Goff 600-acre lease, District 6, Wolfe County.

### Western Division

Work is reviving some in the western division of the Kentucky Field and with good weather conditions there should be a much larger increase in new developments. The Owensboro district reports the largest number of completions for the past several days, although it has not as many new wells under way as Barren County, but the producing wells are much more prolific. Quietude prevails in both Allen and Warren Counties, possibly caused by a shortage of water.

### Owensboro District

The Owensboro district shows a vast improvement of late and nearly every drilling machine in the field has found work. The White Plains Oil & Gas Co. (Snowden interests) brought in its initial well on the south 50 acres of the Joe Bob Ellis lease, lying to the south of the railroad in the Swope Pool and directly south from the well on the northern part of the Joe Bob Ellis 150 acres, where J. M. Loman, trustee, is operating. This well is estimated by natives as showing for from 150 to 200 bbls., but a well-known oil man puts it at 15 bbls. settled, which means that its first 24 hours' production was considerably larger as the wells start dropping off in a few days after being put on the beam and settle quickly to normal producers, where they stay for an indefinite time. This is what makes the Owensboro wells so prominent, as they can be figured on about what they will do a few weeks after put on the beam. This well also shows a gas volume of about 500,000 feet. Two other wells will be started on the same lease at once. The oil was found in No. 1 in the Barlow sand. The White Plains Co. is drilling a second test on the John Ward 50 acres and No. 2 on the J. R. Brown 125 acres; No. 3 on the Orella Ralph 78 acres and No. 1 on the Howard lease. No. 2 Ellis is located 400 feet west of No. 1 and should soon reach the Barlow sand.

The Penn Indiana Oil Syndicate is getting real busy. This company's No. 4, on the Laura Mercer 84 acres, is a 10-bbl. pumper from the Barlow sand, while No. 5 is reported a strong 35 bbl. pumper from the same sand. Its No. 3 in the southeast corner of the J. L. Phillips 82 acres is a 20-bbl. pumper from the Jett sand, while a second test on the C. W. Kelley 260 acres is a 10-bbl. pumper. This company is drilling No. 2 on the Laura Mercer 108-acre farm and starting a test on the Holbrook 50 acres, which was formerly the east half of the T. Ralph 100 acres.

W. F. Stevenson failed to find commercial production in the Jett sand in his well on the north 80 acres of the Guenther-Gant farm, in the Swope Pool and abandoned it as a failure.

The Greasy Creek Oil Co.'s No. 8 on the Dave King farm, in the Hurricane area, lost a joint of pipe in the hole which had reached to the sand. The well shows for a 4-bbl. producer.

The Leeper Oil Co.'s No. 9 on the Lon R. Helm farm, is a 20-bbl. pumper in the Jett sand. This company is drilling No. 7 on the J. S. Collier farm, in the Collier Pool. C. A. Leeper and the Dearborn Oil Co. of Chicago is drilling a second well on fee land. The Leeper Oil Co. is drilling a test on the J. A. Greer 100 acres, southwest of the Midkiff production.

The Chicago Petroleum Syndicate's No. 5 on the Guenther-Gant lease, in the Swope Pool, is reported a 20-bbl. pumper in the Jett sand, the other wells on the farm getting their oil from the Barlow sand below the Jett formation.

The Panther Creek Oil Co. is drilling No. 12 on the John W. Smith 120 acres. The Wood Oil Co. has secured the west 50 acres of the Dean and Owen 100 acres, south of the Joe Bob Ellis farm, and has started a well on the lease. On the east half a dry hole was drilled a long time ago. J. W. Loman, trustee, is starting No. 3 well on the Joe Bob Ellis farm, north of the railroad and north of the White Plains Oil & Gas Co.'s 50 acres off the same farm. It is an offset to the north of the White Plains well.

The Penn Indiana Oil Syndicate now has 53 wells in the field, located around the Powers lease and in the vicinity of Herbert School House, and is among the large operating concerns in the field, being next to the Leeper interests, which is considered the largest.

The rain which brought water for the drillers and the recent increased price of crude oil have set many of the idle drilling rigs to work.

It is reported that the dry hole drilled by W. F. Stevenson on the north 80 acres

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# ACTIVITY AT ALLENDALE REVIEWED BY 225-BBL. COMPLETION THERE

By Whit
*Staff Correspondent, Central West Fields*

FINDLAY, Ohio, June 11.—The completion of the 255-bbl. well on the Kogan heirs' farm, in Wabash Township, Wabash County, Illinois, has once more brought the Allendale Field into the limelight and will bring about a more active drilling campaign on adjoining leases. It is the largest producer found in that field for some time. Several other wells are nearing pay sand in the same pool as well as in the Bass Pool, several miles to the southwest.

The Central Ohio Field is credited with a Clinton sand producer in Hardy Township, Holmes County, the Bridges' farm well, with 65 bbls. or better.

Indiana's only completion of note was on the Stewart Brothers farm, in Clay Township, Pike County, reported at 15 bbls.

The Lima Field of Ohio is credited with two 25-bbl. producers on the Danzig farm, in Cynthian Township, Shelby County, and on the Nolan farm, in Center Township, Mercer County.

Activities in the Central West Field have taken on a fresh impetus with the advent of warmer weather and an improved condition of the fields. The week shows a total of 25 completions, with a flush of 526 bbls., 7 dry holes, and 3 gas wells. There were also 6 old wells abandoned.

### Lima Field

Conditions have bettered to some extent throughout the old Lima Field of northwestern Ohio, although the past week only found a few completions, due to a shortage of water for drilling purposes in some parts of the field. A heavy rain prevailed Sunday that will replenish the shortage and should bring about additional drilling. A few scattered wells are found in parts of Sandusky, Wood and Ottawa Counties. Only two wells were found drilling in Sandusky County on a Sunday trip of the county. One is on the Amos Waggoner farm, Section 11, Washington Township, northeast of Hessville and southeast of Lindsay, which is No. 3 well for the Bee Oil Co. No. 2 was recently brought in with a production of 15 bbls., the other is Harley, Henderson & Warner's No. 4, on the W. O. Doll lease, Section 35, Scott Township, same county. In the Elmore Field, in Harris Township, Ottawa County, the Burman Oil Co.'s second well in the southwest corner of the H. W. Nieman farm, mapped as the N. Tyson farm, Section 23, with a production of 5 bbls., with sand topped at 1,253 feet and drilled to 46 feet in the sand. No. 3 is being started. The Ohio Oil Co. is also starting No. 15 on the J. H. Bergman farm, Section 19. No. 14 was a 5-bbl. pumper.

The Fort Laramie Oil & Gas Co. drilled in No. 6, 700 feet from the south line and 146 feet from the east line of the Frank Danzig farm, in the northeast quarter of Section 16, Cynthian Township, Shelby County, with a flush of 25 bbls. Sand was found at 1,281 feet and oil at 45 feet in the sand. The Wittmer property, trustee, drilled in No. 3, 700 feet from the north line and 12 feet from the west line of No. 2 John Zimmerman

(Continued on Page 140)

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# East Drilling Old Wells to Lower Sands

## Practice Growing in Most of Pennsylvania, West Virginia and Southeastern Ohio Areas. Empire Gets 140-Bbl. Well

By D. S. Wakenight
*Staff Correspondent, Eastern Fields*

PITTSBURGH, Pa., June 14.—Since the eastern fields were last reviewed, development work has been almost featureless. Fewer wells were completed and only a few better than the average pumper. At the present time no section is showing an increase in production. Even the deep sand territory in southeastern Ohio fell down, completing only a very few fair producers. Taken as a whole, development work is very much on the routine order, drilling in old territory where the best hoped for are light wells.

The best producers completed are located in the Big Injun sand development in Henry district, Clay county, West Virginia. This and Ritchie county are the most active in development work. The chances for extending the producing limits of the Clay county pool are promising and the number of wells now drilling should give an increase in production when completed. The Ritchie county development is much older than that in Clay county and of the number of wells completed, more are gas wells than oil producers. In the lower counties the gas companies are still quite active. The completion of the Hope Natural Gas Co.'s extension to its pipeline is an incentive to test and develop territory that previously had no market for its gas.

**Drilling Deeper Old Wells.**

Rather than take chances on finding strictly new producing territory, operators are drilling many of the old wells down to the lower sands. It is not nearly so expensive to drill for an increase in the production of an old well as to start at the top and the chances against getting a producer of any kind. In almost all of the old fields there is more or less of this kind of work.

Producers and operators were somewhat disappointed that the crude market did not advance during the week. The demand for refined products, gasoline and oils, have been increasing rapidly and in the opinion of the majority, the crude market is due for an advance.

**Best Completions of Week.**

In Hardy township, Holmes county, the Empire Gas & Fuel Company got a producer that produced 140 barrels the first 24 hours after it was shot in the Clinton sand, located on the Bridges farm.

In Perry township, Licking county, the same company got a producer good for 65 barrels a day at a test on the Brown farm.

None better than light pumpers was completed in the shallow sand territory. The Berea grit development in York township, Morgan county, is no longer furnishing better than average wells. There is now more new work under way and starting in Athens county than any other of the shallow sand districts.

All of the fair producers completed in the West Virginia fields during the week are located in Henry district, Clay county. The South Penn Oil Co.'s No. 22 on the O. D. Stockly farm and No. 2 on the Joseph Belcher farm are good for 30 and 25 barrels, respectively. In the same development, the Virginian Gasoline & Oil Co. got a 25-barrel producer when it completed No. 12 on the J. B. Casto 260 acres. There are 15 wells drilling and 9 rigs up in this pool.

All of the completions in the southwest Pennsylvania fields came in gassers, with one exception, Pinkerton & Neuhart's test on the Huggins farm, a 3-barrel pumper, in Marshall township, Allegheny county.

**Late Completions.**

In Henry district, Clay county, the South Penn Oil Co. completed another test on the Joseph Belcher farm estimated to be good for 25 barrels a day.

**Good Gasser in Roane County.**

On Green creek, Harper district, Roane county, the Green Creek Oil & Gas Co. has completed in the Big Injun sand a test on the Ruby Dixon farm. It is a gasser good for 3,000,000 feet a day. On Leading creek, Sheridan district, Calhoun county, the Chemical Oil Co. has the rig completed for another test on the Miller heirs' farm.

**Gassers in Lincoln County.**

In Union district, Lincoln county, the Union Oil & Gas Co.'s test on the Burton-Breedlove farm is a gasser in the Berea grit. The United Fuel Gas Co. has a gasser in the same formation at a test on the J. W. Dingis farm. The Sovereign Gas Co.'s test on the R. A. Thompson farm is a gasser. In Jefferson district, the Cambridge Gas Co. is due in the sand at No. 4 on the Henry Linville farm and a test on the Horse Creek Land & Mining Co.'s property.

**Boone County**

Development work in Boone county shows some improvement. In Washington district, the Owens Bottle & Machine Co. has started to drill a test on the Mary Miller farm. In the same district, the same company is drilling on the Little Coal Land Co. tract, the T. W. Bedford heirs' farm and the Coal River Mining Co.'s property. The Pure Oil Co. is drilling eight wells in Sherman district.

**Clay County.**

In the Big Injun sand development in Henry district, Clay county, West Virginia, the Virginia Gasoline & Oil Co. completed in the Big Injun sand No. 12 on the J. B. Casto 260 acres good for 20 or 25 barrels a day. On the waters of Mud River, Grant district, Cabell county, the Monickel Gas Co. has completed in the Berea grit a gasser good for 200,000 feet, on the J. D. Bell farm. The location is 3,000 feet north of the test on the Garnet Morrison farm.

In DeKalb district, Gilmer county, the Philadelphia Oil Co. has a Maxon sand producer good for 20 barrels a day at its No. 3 on the D. Stalnaker farm. In Union district, Pleasants county, W. J. Cleary and others have completed a test on the B. Flesher farm and have a duster.

**Pleasants County.**

In Union district, Tyler county, Samuels & Gale have completed No. 11 on the Gale heirs' farm. Since given a shot in the Keener sand it is showing for a 4-barrel pumper. In Skin Creek district, Lewis county, the Mud Lick Oil & Gas Co.'s test on the J. W. Linger farm is a gasser in the Big Injun sand. In Union district, Ritchie county, the Carnegie Natural Gas Co. has a light producer in the Big Injun sand at No. 3 on the A. L. Britton farm. In Sherman district, Calhoun county, the Euclid Oil & Gas Co. has the rig completed for No. 3 on the W. A. C. Board farm.

In Liberty district, Marshall county, the Manufacturers Light & Heat Co. completed in the Gordon sand No. 3 on the William & Ellen Ritter farm, good for 45 barrels a day. In the same district, the same company's No. 6 on the D. W. Keller farm is good for 9 barrels a day in the same formation.

In Church district, Wetzel county, the Round Bottom Oil & Gas Co.'s test on the Lewis heirs' farm is a gasser in the Gordon sand. In New Milton district, Doddridge county, the Clifton Oil & Gas Co. has a light pumper in the Big Injun sand at No. 22 on the Joseph Freeman farm.

In Center district, Calhoun county, the Hope Natural Gas Co. is fishing at 1,900 feet on the L. F. Norman farm. In Lee district, McIntosh & Scott's test on the J. M. Morgan farm is a gasser in the Big Injun sand. In Walton district, Roane county the United Fuel Gas Co. has a gasser in the Big Injun sand at a test on the Ira S. Taylor farm. In Murphy district, Ritchie county, the Hope Natural Gas Co.'s test on the Joseph Matthess farm is a gasser in the Big Injun sand.

In Battelle district, Monongalia county, West Virginia, the South Penn Oil Co. has now drilled No. 14 on the Accha Eddy farm through all sands and dry. In the same district the same company is drilling a second test on the Isaac C. Moore farm.

In Liberty district, Marshall county, the Hope Construction & Refining Co. has an 8-barrel pumper in the Gordon sand at its test on the D. A. Fair farm. In West Union district, Doddridge county, C. H. Pigott has now put his No. 4 on the B. F. Hefflin farm to pumping from the Big Injun sand and it is producing 12 barrels a day.

**Ritchie County.**

In Union district, Ritchie county, the Valley Oil Co. has a gasser in the Big Injun sand at a test on the Daisy Cox farm. In the same district, the Pittsburgh & West Virginia Gas Co. has the rig completed for a test on the J. Spicer farm. In Grant district, William Wyatt & Co.'s No. 10 on the West Virginia tract is a 3-barrel pumper. In Clay district, Wood county, the Big Sand Oil Co. has the rig completed for a test on the U. S. Anderson farm. In Williams district, Reed, Anthey and the Gant Oil Co. has a duster at No. 4 on the George Henry farm.

**Pleasants County.**

In Grant district, Pleasants county, B. E. Crippen's No. 3 on the P. H. Racer farm is a duster in the first Cow Run sand. The Delong Farm Oil Co. had the same luck at a test on the C. C. Delong farm. In Washington district, Coleman and others have a 3-barrel pumper at a test on the W. H. Robison farm.

In Battelle district, Monongalia county, West Virginia, Benjamin Clovis and others completed a gasser in the 50-foot sand at a test on the Elijah C. Clovis farm. In Union district, Marshall county, the Decem Development Co.'s test on the Mrs. John Minkemier farm is a duster in the Big Injun sand.

In Sherman district, Calhoun county, the Hope Natural Gas Co. completed a gasser in the Big Injun sand at a test on the F. C. Stump farm. In Center district, the same company's test on the S. M. Geho farm is a gasser in the Maxon sand.

**Gilmer County.**

In DeKalb district, Gilmer county, the Philadelphia Oil Co.'s test on the Robert E. Satterfield farm is a gasser in the Maxon sand. In the same district, Satterfield & Co. have a salt sand gasser at a test on the J. T. McClain farm. In the same locality, Mc-

(Continued on Page 88)

# CONTRACTORS HAVING TROUBLES IN SAGINAW, MICHIGAN, FIELD

By Whit

SAGINAW, Mich., June 12.—Contractors are having their troubles in the new Saginaw Field, and no new completions have been made since the Saginaw Prospecting Co. brought in its well on the Northmoor subdivision in the northwestern portion of the city of Saginaw. The Bliss Petroleum Co. is still fishing in the Marshall sand for two strings of tools lost on the Boldebuck farm and the same company Friday ran up against a fishing job on the Fred Engle farm, Section 10, also in the Marshall sand. The Sun Oil Co. has been fishing for some time in the Marshall sand at its No. 1 on the John Schoenheit farm, Section 11, where tools were lost the second time and concluded to jack the rig over and start a new hole, which is being done. It looks very much as though the next completion will be the Saginaw Prospecting Co.'s No. 1 on the John Palvez farm, Section 14, which is an offset to the Bliss Petroleum Co.'s producing well on the Casper Ulrich farm, it being down close to 1,000 feet. The Sun Oil Co.'s No. 1 on the Adam Nuerminger, Section 11, just north of its producing well on the Weiss farm, is about the same depth as the drilling well on the Palvez farm, so that it's 50-50 as to which will strike the pay sand first.

The most westerly development of the field is V. M. Vorhees and others' well on the Jane Marshall farm, along the State road, Section 16, about 2½ miles west and ½ mile south of the discovery well of the pool. This well is down close to the Marshall sand at around 600 feet.

The Superior Oil Co. is rigging up at its location on the John Spatz property near the corner of Weiss and Hermansau streets within the city limits. Work has started on the rig for the Gardner Petroleum Co., of Tulsa, Okla., on the Schwannecke farm, on the Hess road southeast of Saginaw and about 5 miles from the discovery well to the southeast.

The outcome of the edge wells will show whether or not the field has any extension to the north, west and southeast as well as to the northeast and east, varying from ½ to 5 miles away from present production.

The Saginaw News Courier has this to say of development work in the Saginaw Field:

"The Ohio Oil Co. will start opera-

(Continued on Page 144)

# CROWN CENTRAL PETROLEUM CORPORATION

*General Sales Office*
17 BATTERY PL[illegible] YORK, N. Y.

*Branch Sales Offices:*
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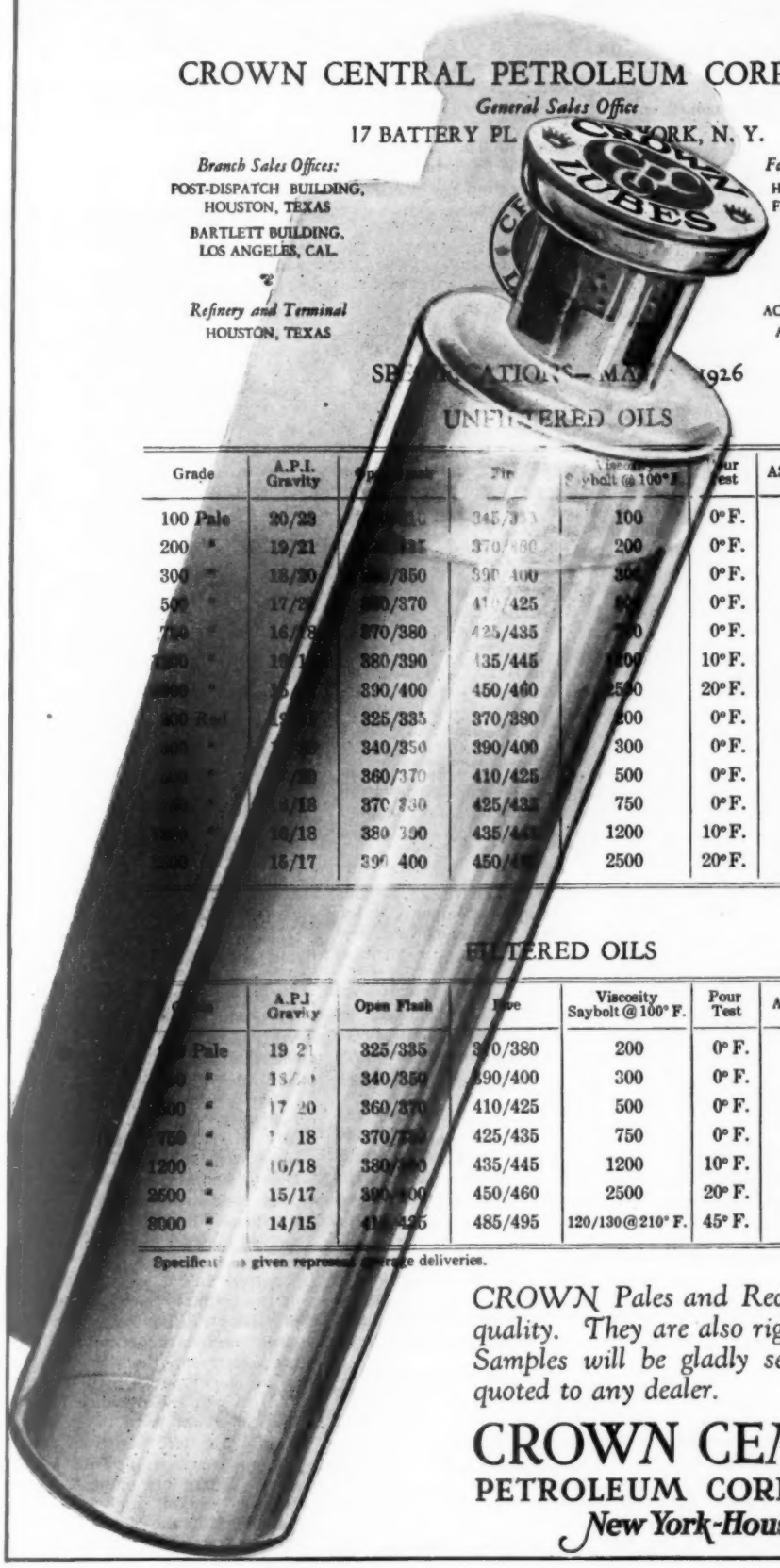



SPE[illegible]ATIONS—MA[illegible]1926

UNFILTERED OILS

| Grade | A.P.I. Gravity | Open Flash | Fire | Viscosity Saybolt @ 100°F. | Pour Test | ASTM Color | Carbon Residue |
|---|---|---|---|---|---|---|---|
| 100 Pale | 20/23 | [illegible] | 345/355 | 100 | 0°F. | 2 | 0.02 |
| 200 " | 19/21 | [illegible] | 370/380 | 200 | 0°F. | 2½ | 0.05 |
| 300 " | 18/20 | [illegible]/350 | 390/400 | 300 | 0°F. | 2½–3 | 0.05 |
| 500 " | 17/[illegible] | [illegible]/370 | 410/425 | 500 | 0°F. | 3–3½ | 0.06 |
| 750 " | 16/18 | 370/380 | 425/435 | 750 | 0°F. | 3–3½ | 0.08 |
| 1200 " | 16/18 | 380/390 | 435/445 | 1200 | 10°F. | 3½–4 | 0.10 |
| 2500 " | 15/17 | 390/400 | 450/460 | 2500 | 20°F. | 3½–4 | 0.15 |
| 300 Red | [illegible] | 325/335 | 370/390 | 200 | 0°F. | 5–6 | 0.05 |
| 500 " | [illegible] | 340/350 | 390/400 | 300 | 0°F. | 5–6 | 0.05 |
| 750 " | [illegible]/20 | 360/370 | 410/425 | 500 | 0°F. | 5–6 | 0.06 |
| 1200 " | [illegible]/18 | 370/380 | 425/435 | 750 | 0°F. | 5–6 | 0.08 |
| 2500 " | 16/18 | 380/390 | 435/445 | 1200 | 10°F. | 5–6 | 0.10 |
| 5000 " | 15/17 | 390/400 | 450/460 | 2500 | 20°F. | 5–6 | 0.15 |

FILTERED OILS

| Grade | A.P.I Gravity | Open Flash | Fire | Viscosity Saybolt @ 100° F. | Pour Test | ASTM Color | Carbon Residue |
|---|---|---|---|---|---|---|---|
| [illegible] Pale | 19/21 | 325/335 | 370/380 | 200 | 0° F. | 2½ | 0.04 |
| 300 " | 18/20 | 340/350 | 390/400 | 300 | 0° F. | 2½ | 0.03 |
| 500 " | 17/20 | 360/370 | 410/425 | 500 | 0° F. | 2½ | 0.06 |
| 750 " | [illegible]/18 | 370/380 | 425/435 | 750 | 0° F. | 2½–3 | 0.08 |
| 1200 " | 16/18 | 380/390 | 435/445 | 1200 | 10° F. | 3–3½ | 0.09 |
| 2500 " | 15/17 | 390/400 | 450/460 | 2500 | 20° F. | 3–3½ | 0.13 |
| 3000 " | 14/15 | 415/425 | 485/495 | 120/130@210° F. | 45° F. | 3–4 | 0.17 |

Specifications given represent average deliveries.

*CROWN Pales and Reds are right in quality. They are also right in price. Samples will be gladly sent and prices quoted to any dealer.*

CROWN CENTRAL
PETROLEUM CORPORATION
*New York-Houston*

# MEN KNOWN IN OILDOM

**Eugene Holman**

Eugene Holman, recently promoted to be chief geologist of the Humble Oil & Refining Company, at Houston, Tex., to succeed Wallace E. Pratt when Mr. Pratt was chosen as one of the directors of the company, made a record with his company while in Shreveport, La. He was sent to Shreveport in 1919, in charge of the land department and as a geologist. In 1922, he was promoted to be general superintendent of the Louisiana-Arkansas division. Under his guidance the Humble's production was built from nothing in 1920, to a daily output of 13,000 barrels in the early part of 1926.

Aiding Mr. Holman was D. B. Harris, who was assistant general superintendent. Mr. Harris was made general superintendent to succeed Mr. Holman and Fred A. Rice, superintendent at Smackover was transferred to the Shreveport offices and made assistant general superintendent.

Mr. Holman was born in Texas and is 31 years old. He was graduated from the University of Texas with the 1917 class. For one year he was connected with The Texas Company, doing foreign work in Central America and in Mexico. Another year was spent with the United States Geological Survey and in 1919 he joined the geological staff of the Humble. Before coming to Louisiana he worked in the central west Texas fields.

During the World War, Mr. Holman was attached to the air service and was overseas for a few months. He was married in 1923 to Miss Edith Reed, a Mississippi girl.

# PERSONAL PARAGRAPHS

C. M. Landis returned last week to Texarkana, after a 3,200-mile trip through the West.

* * *

Harry W. Shepard, appraisal engineer, has returned to his New York office, after a trip to South America.

* * *

Lou A. Green, president of the Radio Petroleum Company, Fort Worth, Tex., made a business trip to Shreveport, La., last week.

* * *

R. E. Benner, sales manager for Keene & Wolff, Houston, Tex., spent several days in Shreveport, La., last week on company business.

* * *

David B. Crawford, secretary-treasurer of the Parkersburg Rig & Reel Co., Parkersburg, Va., was a recent visitor at Shreveport, La.

* * *

L. S. Allen, district sales manager for the Central Steel Company, has returned from a trip through Texas in the interests of his company.

Lester Moorehead, Louisiana drilling contractor, left Shreveport, last week for Maracaibo, Venezuela, where he will run a string of tools for the Dixie Oil Company.

* * *

Chief Deputy J. B. Case of the California State Mining Bureau is in Nebraska for a two weeks' visit at his old home near Columbus, his first visit since 1893.

* * *

W. A. Williams, president of the Crown Central Petroleum Corporation, with Houston, Tex. headquarters, has returned from New York where he spent a month on business.

* * *

D. J. Moran, vice president of The Texas Company, went through Fort Worth, Tex., on his way back to Houston, after visiting the Wichita Falls office and other parts of north Texas.

* * *

A. C. McLaughlin, executive vice president of the Associated Oil Company, visited Los Angeles to deliver an address before the convention of the National Purchasing Agents Association.

* * *

L. E. Phillips, vice president and general manager of the Phillips Petroleum Company, which has nearly a hundred strings of tools running in north Texas, was a Fort Worth, Tex. visitor.

* * *

William Barr, Jr., director of manufacturing of the Regan Forge & Engineering Company, San Pedro, Calif., is making a tour of the Mid-Continent oil fields in the interests of his company.

* * *

R. W. Thomson, of the land department of the Wiser Oil Company, with headquarters at Sistersville, W. Va., is looking after the gas interests of the Wiser Company, in the Central Ohio Oil Field.

* * *

Dr. D. C. Barton, chief geologist of the Rycade Petroleum Corporation, with Houston, Tex., headquarters, is delivering a course of lectures at the Chicago University on geology. The course covers two weeks.

* * *

R. B. Kahle, president of the Beacon Oil Company and Louisiana Oil & Refining Corporation, whose headquarters are in Boston, Mass., made a tour of inspection over the company's Louisiana and Arkansas properties.

* * *

L. B. Riddle, vice president in charge of production for the Shaffer Oil & Refining Company, Tulsa, made a trip to Colorado City, Tex., and other west Texas points with J. E. Fitzpatrick, president of the Deep Rock Oil Company.

* * *

Dean E. Winchester, geologist, is back at his office in Denver after a week's inspection of the Texas Panhandle district. Mr. Winchester announces that he is not connected with J. H. Clark & Company as reported in Amarillo.

* * *

M. R. Singleton and family of Toledo, Ohio, have left for their summer cottage at Lakeside, Ohio, where they will remain during the hot season. Mr. Singleton is a well known refiner, formerly with the Paragon Refining Company.

* * *

Harry P. Ferree, formerly with the Ohio Oil Company and now located at Denver, Colo., with the Continental Oil Company, is visiting Casper, Wyo., for a short visit and has purchased a summer home in the Casper mountains for his family.

* * *

R. G. Taylor of Denver, formerly with the Glenrock and Marine Oil Companies, and a well known operator in Wyoming fields, visited Casper, Wyo., for a short business trip. Mr. Taylor is now vice president and director in the Gibson Oil Company.

* * *

Joseph Allen, of Houston, Tex., has been appointed as representative of the Regan Forge & Engineering Company, at Tampico, Mexico. Mr. Allen spent many years in Mexico and is familiar with conditions there and with the supply business.

* * *

W. R. Ramsey, who inaugurated the development in the southeast portion of Signal Hill some years ago, was a Los Angeles visitor recently. Mr. Ramsey sold his Long Beach interests to the Rio Grande Oil Company some months ago, but has not entirely severed his West Coast interests.

Mr. and Mrs. H. J. Allen have left Casper, Wyo., for the Atlantic Coast, whence they will sail for South America where they are to make their future home. Mr. Allen was associated in Casper with the Oil Well Supply Company. In South America, he is to be the representative of the Sun Oil Company.

* * *

Harry P. Ferree of Denver, secretary and director of the Continental Oil Company, purchased the summer home of G. R. Hagens in the Garden Creek Falls district above Casper, Wyo. Mrs. Ferree and friends will spend the summer at the cottage and Mr. Ferree will divide his time between Denver and Casper offices of the company.

* * *

E. G. Sinclair, geologist for the past seven years with the Midwest Refining Company, has resigned to accept a position with the Sun Oil Company, in charge of its geological work in foreign fields. After a conference at Dallas, Tex., with President J. Edgar Pew regarding his new field of work, Mr. Sinclair expects to sail from New York City for Venezuela, June 16. On Mr. Sinclair's return from Venezuela, the family will probably move to Dallas.

* * *

W. R. Finney, superintendent of the gas department of the Midwest Refining Company, has left for California, his former home and will spend a short vacation with his parents on the Pacific Coast. Mr. Finney, together with A. W. Peake, came to Wyoming before the gas at Salt Creek was considered worth anything except to burn. Through their efforts the largest gasoline compressor plant in the world has been placed in that field.

* * *

J. S. Mellon, sales manager of the Dunn Manufacturing Company, is making his headquarters temporarily in Wichita Falls, Tex., where he has returned from a trip through the Mid-Continent territory. He announces Shep Miers will cover Arkansas, Louisiana and the Gulf Coast area for the company, and E. F. Austin will make Oklahoma and Kansas. R. T. Todd, of the company, is making a trip through the Rocky Mountain fields.

* * *

W. S. Sugden, of the legal department of the Trico organization, of Sistersville, W. Va., accompanied by his wife, daughter, Elizabeth, and mother, left for England and Scotland on June 11. Mr. Sugden was elected a delegate from the Sistersville Kiwanis Club to the International Convention of Kiwanis Clubs held in Montreal, Canada. The Trico organization comprises the producing firms of the Petroleum Exploration Company, Wiser Oil Company and Amity Gasoline Company.

* * *

The following appointments have been made in the producing department of the Standard Oil Company of California, with headquarters in San Francisco: M. E. Lombardi, assistant general manager; E. G. Gaylord, chief petroleum engineer; Wallace Canfield, assistant to general manager; and H. R. Longaker, manager, supply division. With the exception of Mr. Longaker, all formerly were identified with the Pacific Oil Company, as was Earle Derby, who also is now with the Standard Oil Company, and will have charge, in particular, of deliveries of fuel oil to the Southern Pacific Railroad, and of all fuel oil and crude oil exchanges.

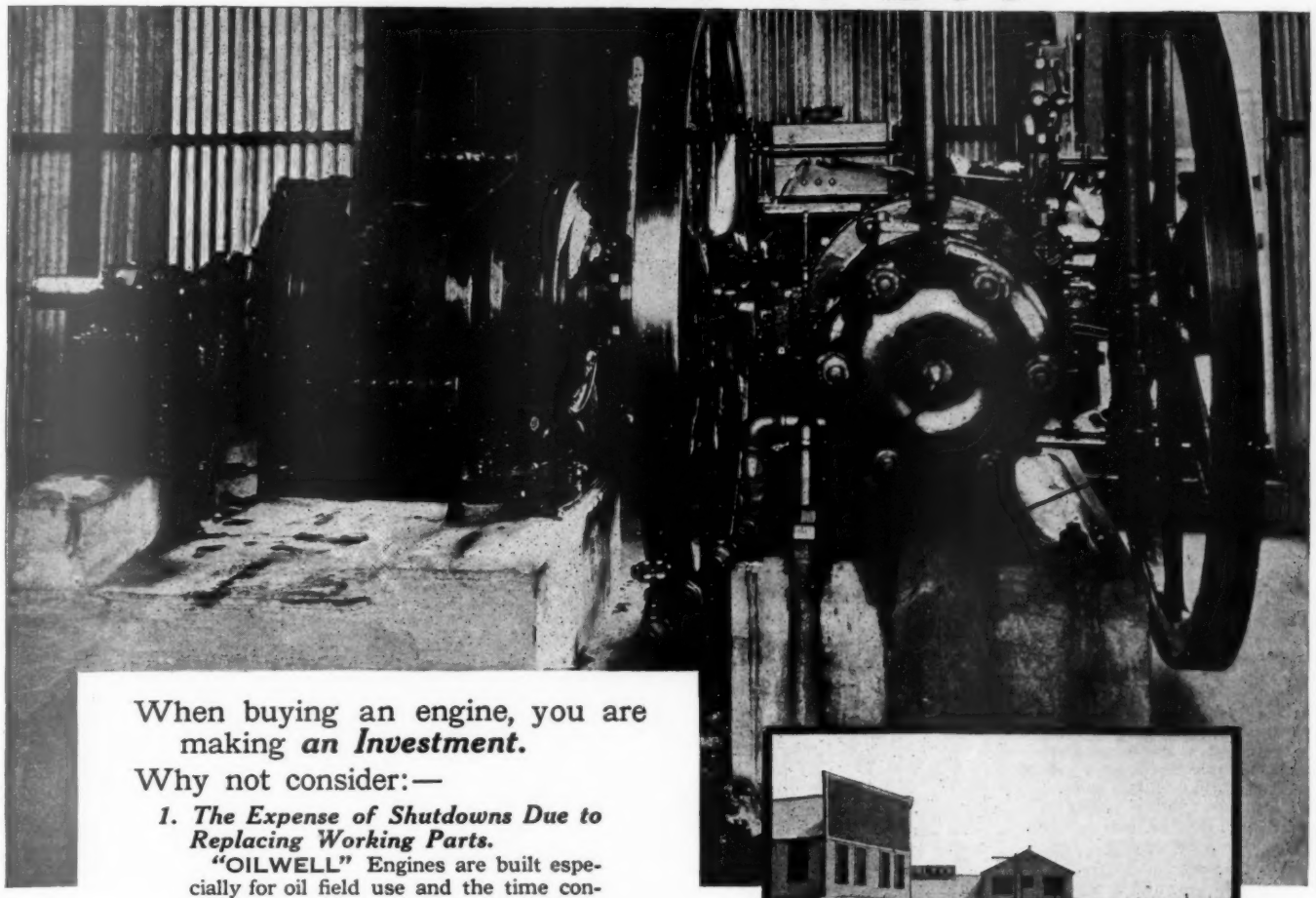
* * *

An oil field inspection trip that is decidedly out of the ordinary has just been made by B. E. Hull, president of the Texas Pipe Line Company. Mr. Hull wanted to get an entirely different view of the country all the way from Houston to Amarillo, so he chartered an airplane in the Gulf Coast city and covered the distance in a fraction of the time that it would have taken him to make it on the train. He left Houston at 10:50 in the morning and arrived in Fort Worth just three hours later. There his plane was serviced with Texaco gasoline and oil, and J. B. Haden, pipeline superintendent of the north Texas district, joined him on the trip to Wichita Falls, which was made without incident, in an hour and 15 minutes. It was Mr. Haden's first experience in the air but he says he wouldn't take anything for the experience and that the picture of north Texas development which he had from the plane gave him an entirely different idea of Texas production. Mr. Haden returned to Fort Worth by train and Mr. Hull continued on with his pilot to Amarillo for a look at the "biggest thing out of doors."

XUM

# "OILWELL" Two Cycle Gas Engines

## FURNISHED COMPLETE ~ READY TO RUN
## NO EXTRAS TO BUY



When buying an engine, you are making ***an Investment.***

Why not consider:—

1. ***The Expense of Shutdowns Due to Replacing Working Parts.***
   "OILWELL" Engines are built especially for oil field use and the time consumed in replacing parts is surprisingly small.
2. ***The Cost of Repairs.***
   The "OILWELL" Two-Cycle Gas Engine is unusually compact, has few working parts, and the crank case is completely enclosed. A mechanically operated lubricator furnishes correct lubrication, and a water pump insures proper cooling.
3. ***Operation.***
   Requires no special experience to operate, and can be easily started by one man.

Complete equipment includes enclosed crank case, governor, governor belt, water pump, spark plug, exhaust pipe, foundation bolts, and gasometer. Made in 30 and 40 H.P.

***These Engines are Sold for an Investment.***
Send for special Bulletin, or inquire at any of our 100 Branches.

Three of 16 "OILWELL" Two-Cycle Gas Engines Destined for a Large Operating Company's Lease in Oklahoma.

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# OIL WELL SUPPLY CO.

NEW YORK—LOS ANGELES—PITTSBURGH, U.S.A.—SAN FRANCISCO—TAMPICO—LONDON

WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT

# NATURAL GAS DEVELOPMENTS

## NATURAL GAS ANALYSIS BY BUREAU OF MINES

Accurate determination of the constituents of natural gas has proved a stumbling block to gas analysts unfamiliar with the work, states the Bureau of Mines in Bulletin 197, recently issued. Technical forms of gas-analysis apparatus and established rules for bringing a gas mixture in contact with the absorbents for different constituents are not always effective. Many samples contain absorbab'e constituents, such as carbon dioxide and oxygen, in extremely small quantities. The fact that oxygen may be a constant constituent of natural gas as it leaves a well has not been determined absolutely. The bureau believes that the traces of oxygen reported in some samples were due to contamination of the samples with air.

Olefin hydrocarbons and carbon monoxide have not been identified in the samples already received at the bureau's Pittsburgh laboratory, if the natural gas had not been mixed with artificial gas. Because higher members of the paraffin series are absorbed by fuming sulphuric acid and cuprous chloride, a natural gas that does not contain olefin hydrocarbons of carbon monoxide but does contain these higher members of the paraffin series, when treated with these solutions will undergo a reduction in volume and lead the analyst to a wrong conclusion.

Natural gas usually contains a large proportion of paraffin hydrocarbons, some samples as much as 99 per cent, so that if the paraffins are determined by explosion methods in which a small quantity of gas is used a slight error of manipulation will be multiplied 10 or 12 times in calculating results to a percentage basis. Methane is the only hydrocarbon that some natural gases contain; but if a small quantity of sample is taken for the combustion analysis, errors are magnified. The relation between the volume of carbon dioxide and the contraction produced by the combustion may indicate hydrogen, although this gas is absent. Although the error in the observed data may be small, by calculation to a percentage basis it may amount to several per cent of hydrogen. Many published analyses of natural gas are undoubtedly much in error from such cases.

The paraffin hydrocarbons that are gaseous at ordinary temperatures are methane, ethane propane and butane. Since the last two are liquefied at ordinary temperatures by pressures below those existing in most producing wells, quantities other than small proportions carried by the permanent gases would hardly be found in natural gases coming from wells under very high pressure. On the other hand, gases drawn from wells under a partial vacuum may contain large amounts of these and higher parffins.

## GAS REFRIGERATION FOR COOLING HOMES

Mechanical cooling of homes by gas promises to be realized in the near future. At a recent meeting on gas refrigeration held in New York City 60 of the leading authorities on gas refrigeration discussed this new business of the gas industry. The meeting was under the auspices of the American Gas Association.

Experts announced that domestic gas-fired refrigerators had proved successful in tests in various parts of the country and would be available for the general public in the early fall. Heat absorbed by the plant would be pumped into the rooms of the house during cold weather and in hot weather cold air produced in the refrigerating unit would be pumped in through the same pipes. It was announced that a gas refrigerator will be connected to a gas house-heating furnace in a house now being built in one of Chicago's suburbs. During the hot weather the furnace will be supplied with air that has been chilled by the refrigerator, and the furnace piping will send this air through the entire house. Extensive tests are to be made on this instal'ation this summer in the attempt to prove that house cooling by gas is both practical and convenient.

## BILL SEEKS TO ABOLISH CARBON BLACK INDUSTRY

SHREVEPORT, La., June 12.—Four pieces of legislation affecting the oil and gas industry are up for consideration before the legislature now in session at Baton Rouge.

One is a proposal to increase the State gasoline tax law from 2 cents to 4 cents to meet increasing expenses in the highway department.

Another is aimed primarily to tighten conservation laws to prevent congested drilling. This measure is aimed particularly at the Urania Field.

The third is directed at the carbon black industry and it is proposed to abolish it. The fourth called for an investigation of the conservation department which was charged with gross mismanagement. By a better than two to one vote the senate indefinitely postponed the resolution to investigate the conservation department.

The death blow aimed at the carbon industry was introduced in the senate by Senator Jones of Bienville Parish. Senator Jones' proposal came as a surprise and was opposed by Senator Hood. Monroe, who lives in the district which supplies the gas for the carbon manufacturers. Senator Hood declared the measure unsound economically and that Louisiana could not afford to junk $10,000,000 worth of equipment being operated by those companies.

Senator Jones stated he had no personal interest in the matter and that his home is 100 miles away from the world's largest gas field, but added he could not see such "frightful" waste continue any longer.

The Monroe carbon makers are burning 275,000,000 cubic feet of gas from the field daily. Their quota was recently reduced to that figure by the conservation laws of the State. Thirty million feet more is being consumed daily by industrial and domestic users.

## Board of Directors of Gas Association Plans Member Drive

SHREVEPORT, La., June 14.—A meeting of the board of directors of the Natural Gas Association of America will be he'd, probably in St. Louis, Mo., Some time during this month. Of the more important matters to be passed upon by the governing board will be plans for a membership drive in the southwestern division of the association. This task will be under the direction of Vice President N. C. McGowen, of the Palmer Corp., Shreveport.

The southwestern division embraces the territory of Louisiana, Arkansas, Texas, Oklahoma and Kansas. The directors will make a budget to finance the campaign and operate southwestern headquarters. A secretary for the division will be selected after the meeting and his headquarters will be either in Shreveport or Dallas, Tex.

The division will not be a separate division of the association but one to more readily serve the needs of the vast number of gas men in the southwestern area.

## COMPUTING LEAKAGE FROM NATURAL GAS LINES

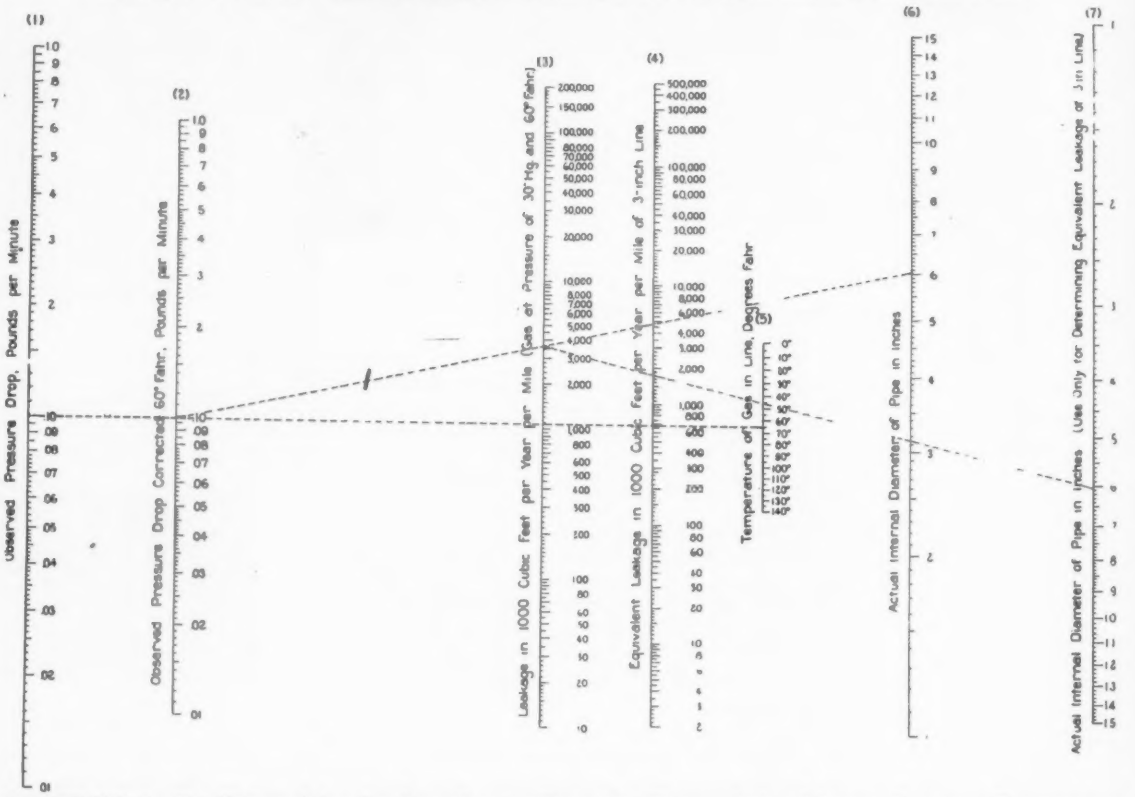
(1)
Observed Pressure Drop, Pounds per Minute
(2)
Observed Pressure Drop Corrected 60° Fahr., Pounds per Minute
(3)
Leakage in 1000 Cubic Feet per Year per Mile (Gas at Pressure of 30" Hg and 60° Fahr.)
(4)
Equivalent Leakage in 1000 Cubic Feet per Year per Mile of 3-inch Line
(5)
Temperature of Gas in Line, Degrees Fahr
(6)
Actual Internal Diameter of Pipe in Inches
(7)
Actual Internal Diameter of Pipe in Inches (Use Only for Determining Equivalent Leakage of 3-in Line)

**CHART NO. 1—For Determining Leakage Losses From Gas Transmission Lines at Constant Temperature**

(This chart may be used where test for leakage is made by the "Shut-in, Pressure-Drop Method" and where temperature in line does not change during time of conducting test.) Procedure for using chart: First obtain the rate of pressure drop by taking pressure readings over a period of time and dividing the difference in pressure readings by the elapsed time, in minutes. Locating the value thus determined on scale (1), connect it by a straight line with the observed temperature on scale (5). The observed pressure drop, corrected to 60 degrees Fahrenheit is then read at the intersection of this line with scale (2). Connect this point with size of pipe on scale (6) and read leakage loss per year per mile of line at intersection on scale (3). To obtain the equivalent leakage for a 3-inch line connect the point found on scale (3) with size of pipe in scale (7). The intersection of this line with scale (4) will give the value of the equivalent leakage for a 3-inch line. Prepared by E. O. Bennett, natural gas engineer, United States Bureau of Mines, April, 1926

By E. O. Bennett[1]

Various methods of making leakage tests have been tried during a study of losses in the transmission of natural gas. This work has been carried on by the Bureau of Mines in co-operation with the Natural Gas Association of America.

[1]Natural gas engineer, Bureau of Mines, Department of Commerce.

Results of tests show that the "shut-in pressure-drop" method described by Rawlins[2] is the most accurate and reliable; therefore its use is recommended. This paper describes a graphic method for computing the rate of leakage from the fall in pressure and change in temperature determined by the "shut-in pressure-drop" method of testing.

[2]Rawlins, E. L., Leakage From Natural Gas Transmission Lines. Natural Gas, Vol. VI, June, 1925, p. 17.

### Measuring Pressure Drop

The gas is "shut in" the line to be tested and is not allowed to escape ex-

(Continued on Page 96)

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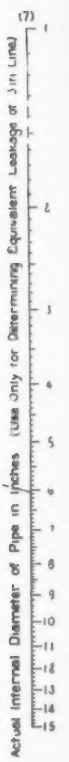


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# ALUMINUM PAINT

## Aluminum Painted Tanks Increase Bulk-Station Profits

ALUMINUM PAINT halts evaporation from bulk-station tanks and tank-trucks. It keeps the oil *cool* by reflecting the sun's heat.

Aluminum Paint's reflectivity lasts, for the Aluminum coat is *polished metal* that does not tarnish.

Less evaporation means more profits. Aluminum Paint cuts upkeep costs, too.

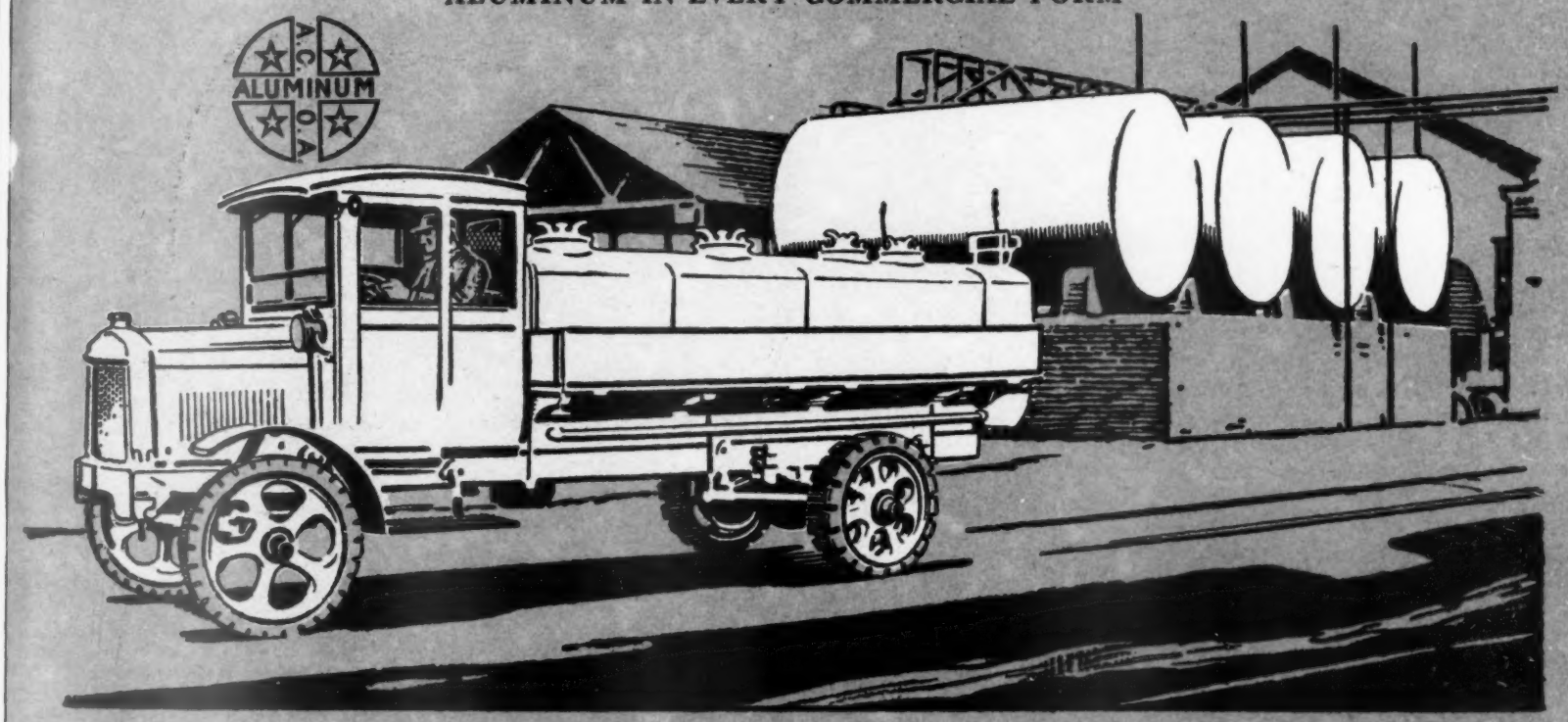
Aluminum Paint protects better and longer than ordinary tank-paints because it "leafs". A coat of metal protects the surface.

Yet Aluminum Paint costs no more than ordinary tank-paints.

Write today for our illustrated booklet—"Aluminum Paint—A Step Ahead in Industrial Painting", which gives complete details.

*Aluminum Paint consists of Aluminum Bronze Powder mixed—two pounds to the gallon—with a suitable vehicle of oil or varnish.*

**Aluminum Company of America**
**2435 Oliver Building · Pittsburgh, Pa.**
*Offices in Seventeen Principal American Cities*
**ALUMINUM IN EVERY COMMERCIAL FORM**



# ALUMINUM PAINT

## Aluminum Paint Cuts Evaporation from Tank Cars

ALUMINUM PAINTED tank cars keep the oil *cool.* Aluminum Paint *reflects*—instead of absorbing—the sun's heat.

Less evaporation is one reason why so many leading oil companies are adopting Aluminum Paint for tank cars and storage tanks.

The longer protective life of Aluminum Paint is another reason. With Aluminum Paint, a *coat of metal* shields the surface and the body of the paint itself—through a new principle—"leafing".

The high reflectivity that cuts evaporation lasts longer. The metallic aluminum coat stays bright.

Aluminum Paint lessens evaporation and cuts down upkeep expense. Yet it costs no more than ordinary tank-paints.

Write today for our illustrated booklet—"Aluminum Paint—A Step Ahead in Industrial Painting". It shows how Aluminum Paint is increasing revenues for leading American oil companies.

*Aluminum Paint consists of Aluminum Bronze Powder mixed—two pounds to the gallon—with a suitable vehicle of oil or varnish*

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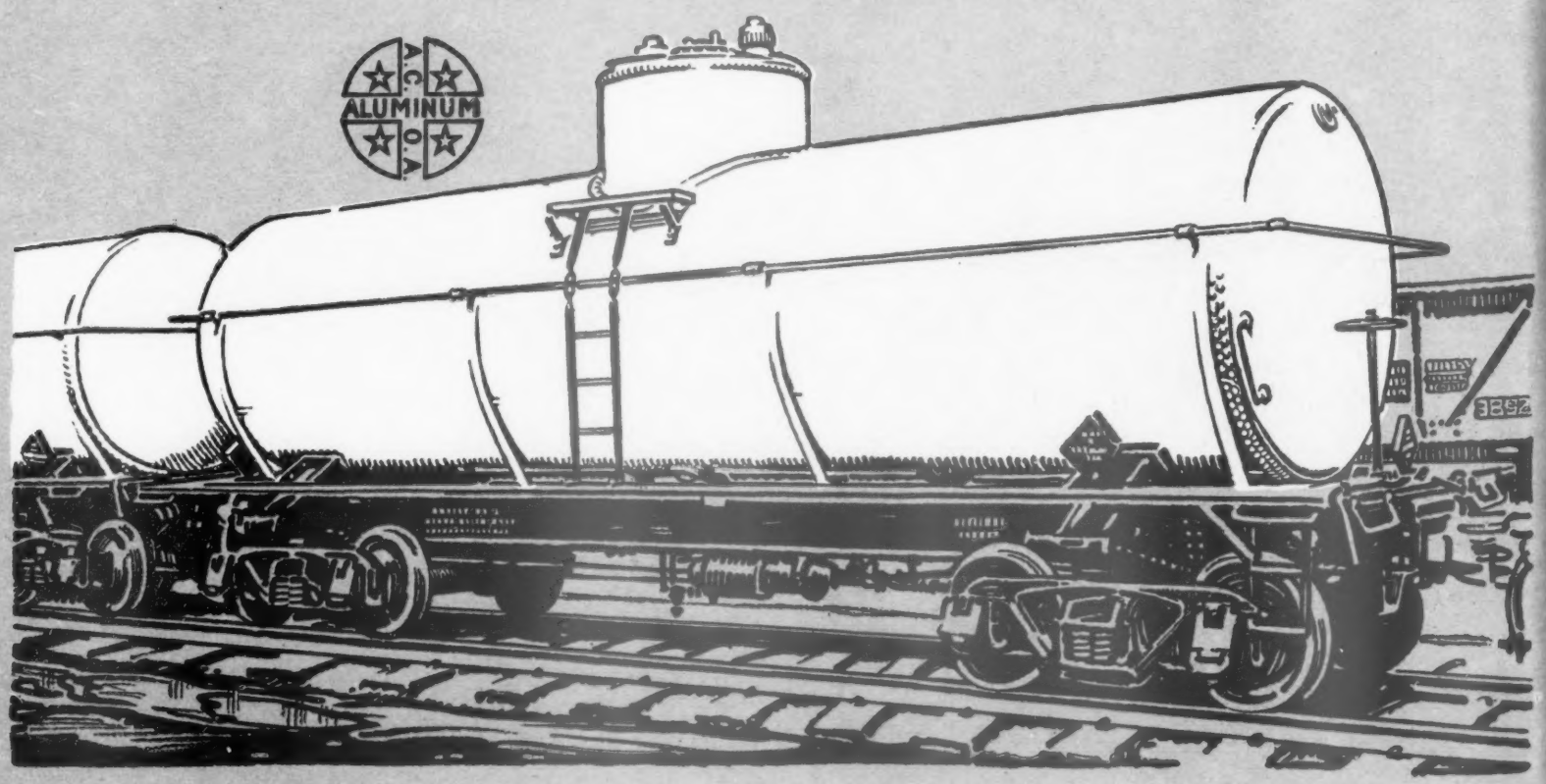

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# EQUIPMENT AND SUPPLIES

## FOR STRONGER PIPE IN THE OIL STRING

With the advent of deep drilling, there arose the requirement of stronger pipe in the oil string. To meet this, the E. M. Smith Co. developed 8¼-inch, 6¼-inch and 4¼-inch sizes of Emsco reinforced screen pipe which is said to double the strength of regular pipe of those sizes.

So evident, the manufacturers say, is the factor of greater safety of the oil string achieved, in the use of seamless pipe for deep drilling, with the Emsco reinforcing members added, operators have insistently demanded a larger size of pipe incorporating this same method of attaining the increased protection. In response to this demand, the E. M. Smith Co. announces it has developed, as a new size, a 15½-inch Emsco reinforced pipe.

The Emsco method of reinforcing, the company says, does not alter either inside or outside pipe diameters which makes it possible for operators to use their regular, standard sizes. "Reinforcing bands and collars are electrically welded to the pipe and result in enormous strength increases which may be likened to a cross-section I-beam. The reinforcings are placed on the outside of the pipe, and have the same size as the collars. While doubling the strength factor, the weight increase is comparatively little. An important feature of Emsco screen pipe is that operators, if desired, may use lighter pipe than they would ordinarily, and yet get the strength of heavier pipe, at a cost small in comparison to buying the heavyweight pipe."

## PORTABLE MACHINE FOR THREADING PIPE

There has been a long felt want for a portable pipe threading machine in oil fields, an outfit that could be transported throughout the fields to cut and thread pipe and casing efficiently and economically.

An oil company official said, "Thousands of dollars worth of pipe and casing could be saved annually by having a machine which would insure good threads and which could be moved from one operation to another.

The Pure Oil Co., of Columbus, Ohio, solved this problem by purchasing an 8-inch Landis pipe threading and cutting machine and a Landis chaser grinder. These machines were mounted on a specially built trailer made by the Highway Trailer Co. of Edgerton, Wis. The 8-inch Landis pipe threading and cutting machine is equipped with all necessary chasers for cutting the various diameters, pitches and tapers of threads found on pipe and casing, used in the Mid-Continent Oil Field.

The Landis chaser grinder was supplied without the pedestal and it was mounted on the front part of the trailer, beside the Fordson tractor. This combination will be of much interest to oil companies as it will eliminate the waste of much pipe and casing and will effect a saving in time.

The Landis portable threading outfit as described herein, is not confined, by any means, to operation in the oil field. It could be used successfully for maintenance work in large plants, or by firms who have plants scattered within a certain area.

## ENLARGING PLANT

The Hughes Tool Co. has awarded contracts for additions to its present plant at Houston, Tex. The increased space will house a drop forging plant. The company will make products which it formely purchased from other companies.

## BUYING OF OIL COUNTRY GOODS WELL MAINTAINED AT PRESENT RATE

By B. E. V. Luty

PITTSBURGH, Pa., June 14.—Buying of oil country goods generally and specifying against contracts reached its highest rate in March and underwent some decrease more than a month ago, but the decreased rate of that time is fairly well maintained, there having been little decrease in the past week or two, and the present volume of demand is approximately equal to that in a fair ordinary year. For a time there was a demand equal to an altogether exceptional rate of drilling, but naturally drilling plans are not as extensive now as early in the year.

All told, the volume of line pipe business placed in the past six or eight weeks makes a very substantial tonnage for the mills, chiefly in moderate sized orders, with many small orders as usual. This line pipe business is the chief backlog of the pipe mills at the present time, and it will be some time in August before present contracts are completed. Meanwhile there is likely to be more business placed as there are quite a number of projects.

Demand for merchant pipe has been very gradually working its way up month by month and is now at as high a rate as can be expected, summer dullness being the next thing on the program if matters take their usual seasonal course. The present demand may still be called spring demand as the season was very backward.

**Pipe Mills 80 Per Cent.**

Pipe mills have an operation at present of about 80 per cent, and seem likely to be able to maintain that rate, or a rate close to it, during the next two or three months as besides the line pipe business accumulated there is some backlog in certain sizes of casing. This 80 per cent rate represents a heavier production, in tonnage, than an 80 per cent rate two years ago, as capacity has increased, with two relatively new plants in the Chicago district. The whole addition is not considered in the pipe trade as an increase in capacity, as two or three old plants are no longer counted in the usual reckoning, being no more than reserve plants for emergencies.

Prices on oil country goods and merchant pipe are being very well maintained at the familiar rates.

The steel market in general is holding up better than was expected, not because general business conditions are better but because the trade had got accustomed to expecting quite a decrease in demand as summer was approached. The pace of demand this year seems more normal, however, than the course last year and the year before, when there were decreases after March or April and then

(Continued on Page 114)

## SAFE HANDLING OF WIRE ROPE

Fatalities and injuries caused by breaking of drilling, casing and sand lines at oil wells can not always be prevented, states H. C. Miller, associate petroleum engineer, in serial 2738, recently issued by the Bureau of Mines, Department of Commerce. They can be reduced in number, however, by the exercise of greater care in the handling of wire rope. Wire lines are perhaps the most abused pieces of mechanical equipment used in the oil fields. Wire rope will not give maximum service when kinked or when nicked by a hammer, chisel or crow bar. Sudden severe stresses are injurious to wire lines. Sheaves and shafts of small diameter appreciably shorten the useful life of wire rope. Slipping a line through the drilling clamps injures the line by throwing unequal stresses into the individual wires. Wire rope should be kept lubricated so as to reduce corrosion, internal friction, scaling, and the resulting wear when individual wires rub against one another. So much depends upon the treatment that a wire rope receives that no hard and fast rule, based on an inspection of the cable in the derrick, can be laid down as to when a wire rope should be discarded. Experiments are now being made to find simple tests by which the strength of wire rope in service can be determined in the field or in the derrick.
power.

## HYDRAULIC DRILLING MOTOR

W. P. Denny, of Houston, Tex., has been granted a patent on a hydraulic motor for drilling wells. It is claimed it will drill to a depth of 6,000 feet or more. A recent experimental operation showed the motor operated with a 150 pound water pressure force and made high speed revolution and furnished more than 300 brake horse

## PIPE CLEANING MACHINE IN WYOMING FIELD

This picture shows the W-K-M pipe cleaning machine starting over the 70-mile stretch of 10-inch line of the Gallatin Natural Gas Co. from the Billings Field to the Elk Basin Reserve in Wyoming. The entire line is being cleaned and insulated.

## ANNOUNCING OFFICE AND STAFF CHANGES

Effective May 22 H. E. Gilmore was named manager of the St. Louis branch of the Timken Roller Bearing Service & Sales Co. Mr. Gilmore's promotion follows several years sales experience with this company under the direction of Frank J. Lemper, manager and district supervisor of the Chicago branch.

The Omaha branch office of the Timken Roller Bearing Service & Sales Co., formerly located at 2524 Farnum St., now occupies larger quarters at 2240 Douglas St. Complete service stocks for authorized distributors will be maintained as in the past. The management will continue under the direction of A. D. Hackim.

The new home of the Los Angeles branch of the Timken Roller Bearing Service & Sales Co., will be at 1361 S. Figueroa St., moving to this location from 1241 S. Hope St.

The growth of sales of Timken Bearings for industrial uses has brought about the promotion of G. W. Curtis, from industrial equipment engineer to district manager of sales, industrial division for the Milwaukee territory. Mr. Curtis will work with R. W. Ballentine, who previously has handled this territory. S. M. Weckstein succeeds Mr. Curtis as industrial equipment engineer. Mr. Weckstein has been notably succesful in developing Timken bearing applications for precision work in machine tools and high speed applications. G. W. Richards and A. R. Spicacci are appointed assistant industrial equipment engineers to assist Mr. Weckstein.

## COVERS OIL ENGINES FOR ALL PURPOSES

"Direct-injection oil engines for all purposes" is the title of a new publication just issued by the Ingersoll-Rand Co., New York. The cover, printed in colors, illustrates the major title by portraying the Ingersoll-Rand oil engines applied to railway, marine, powerhouse, industrial and building applications.

The text matter, which consists of technical data and details of its "PO" oil engines of 55, 110 and 150 b.h.p. sizes, has 42 illustrations of plant layouts, installation views, diagrams and engine details. A copy of this publication is available to executives and engineers by addressing the Ingersoll-Rand Co., 11 Broadway, New York, or any of its representatives in the principal cities.

## NEW SPOKANE OFFICE

The Sullivan Machinery Co. announces that, effective June 1, its northwestern sales office at Spokane, Wash., will be situated at 120 S. Lincoln St., Spokane, instead of in the Hutton Building as heretofore. The change provides larger quarters and the offices, display room and warehouse will be together at this new location. Robert T. Banks is manager.

## STEAM RELIEF VALVE

No work should be done in drilling or pumping engines at oil wells until after the flywheel of the engine has been so blocked that it can not turn, warns the Bureau of Mines, Department of Commerce. The manifold of every twin drilling engine and the steam chest of single cylinder engines should be equipped with a steam relief valve, which should be open when work is being done on the engine or on the draw works machinery. When these precautions have been taken, workmen can work on the engines in safety.

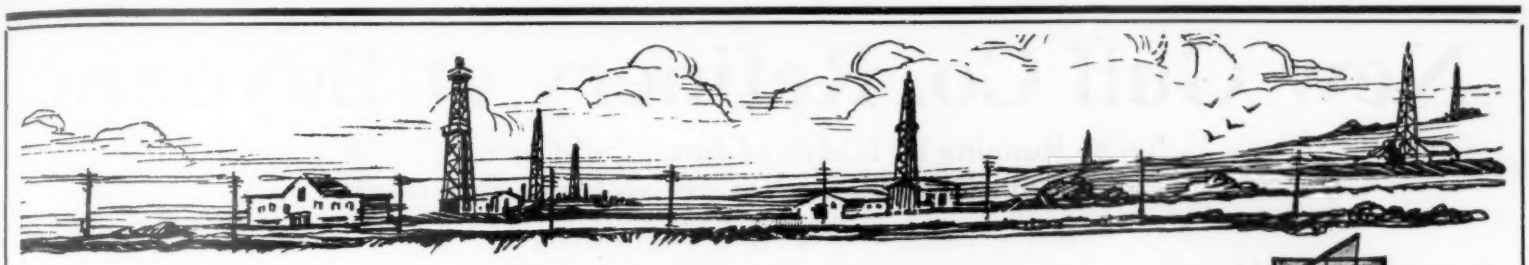
XUM

*If I were offered the exact duplicate of an IDECO derrick at a lower price – I would still do business with* INTERNATIONAL

"The International Derrick & Equipment Company is a leader in its field. It has a reputation to uphold and will back the performance of its products to the limit. It supplies me with engineered products of proven ability, and the kind of service that obviates trouble and delay.

"IDECO Galvanized Steel Derricks and Equipment are built right, priced right and delivered when promised. Plus those advantages, I have absolute confidence in the ability of 'International' engineers. It is a strong organization and my confidence in it is shared by most of the leading oil companies both here and abroad."

INTERNATIONAL STEEL IDECO DERRICKS
(GALVANIZED)



# *There are Substitutes for "International" Derricks – but they are only Substitutes.*

With drilling expenses increasing daily, the operator of today must eliminate all wastes of production. To offset mounting drilling costs, the oil man must reduce the annual expense of maintenance.

But the operator cannot reduce costs by buying cheap equipment. Substitutes for efficient drilling and pumping rigs seldom satisfy. Despite the lower initial costs of wood, operators who have kept a cost record over a period of years and are able to compare it with a structural steel program know that wood is a failure and very expensive in the long run.

There are literally thousands of wooden derricks standing over wells in the oil fields of America today. Most of them have outlived their usefulness. They are eating tremendous holes in the profit. They must be replaced.

The International Derrick of galvanized structural steel is a genuine economy. A substantial saving over even a short period of years can be definitely proven. International Ideco Derricks and galvanized steel equipment minimize fire hazards and lower insurance rates. They represent 100% salvage should the well play out. They show an absurdly low yearly maintenance cost. Aren't they sufficient reasons for you to adopt an "Ideco" program?

*Write or phone our nearest branch*

**The International Derrick & Equipment Company**

**Columbus, Ohio** **Torrance, Cal.**

DALLAS DENVER TULSA SHREVEPORT HOUSTON CASPER BAKERSFIELD
OIL CITY SMACKOVER EL DORADO, KANSAS WICHITA FALLS WEWOKA
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*California National Supply Co., Distributors in California*

*The largest company devoted exclusively to the manufacture of steel (galvanized) equipment for the oil, gas and artesian industries*

# INTERNATIONAL STEEL IDECO DERRICKS (GALVANIZED)

# New Gulf Co. Refinery at Bayonne

## To Be Running by Middle of June. Full Capacity 20,000 Bbls. Daily. Operated on Venezuelan Crude Exclusively

By L. M. Fanning

*New York Bureau, The Oil and Gas Journal, Room 543, 30 Church St., New York*

The latest addition to the Atlantic Seaboard refineries is the plant of the Gulf Refining Co. at Bayonne, N. J., which by the middle of June will be running at its full capacity of about 20,000 bbls. a day. This plant was projected as a result of the successful operations of the Venezuelan Gulf Oil Co. in the South American country, and it will be operated on Venezuelan crudes exclusively, according to present plans.

The plant is located on the site of the company's docking, storage and distribution terminal at Bayonne, which has been in existence for a number of years. It marks the first appearance of the Gulf Co. as a refiner in the East, although the organization has been a large marketer of gasoline in the eastern coastal and New England states for some time.

One of the significant features of the development is its demonstration of the accessibility of Venezuelan products to the concentrated markets of the New York and New England territory.

The refinery is modern in every respect. It is essentially a topping plant, making gasoline and fuel oil, the products in principal demand in the territory in which it is located. No cracking equipment has been installed.

### To Handle LaRosa Crude

The Venezuelan crude handled is the company's LaRosa production, which is a heavy oil but comparable with Mexican so-called light oil. Its gravity is between 22 and 24 degrees, which is considerably higher than the Mene Grande Field oil in Venezuela. The gasoline yield on straightrun, or topping operations, is 10 to 12 per cent.

The Gulf Co. began regular shipments from Venezuela early in 1925, when the Venezuelan Gulf Oil Co. started shipping crude from its terminal at Cabimas in the LaRosa Field by shallow draft tanker to Las Piedras Bay on the west coast of Paraguana on the Gulf of Venezuela. For these inter-terminal shipments the company has specially built tankers, constructed abroad, having a maximum draft loaded of about 16 feet and a maximum capacity of about 18,000 or 20,000 bbls. The outer channel of Maracaibo bar has a depth of about 16 feet but the Toblazas, or inner channel, is shallower and is limited for navigation to vessels drawing not more than 12 feet.

Due to the shallow depth of the inner channel the Gulf's small tankers cannot be loaded to capacity, but carry 12,000 bbls. on an average in regular trips between the field and ocean terminal. The Cabimas terminal comprises dock, tank farm and living quarters. The dock extends about 1,200 feet out into Lake Maracaibo, where the shallow-draft tankers are loaded.

The Gulf's big Venezuelan storage and ocean loading terminal on the Paraguana Peninsula, on what is known as Las Piedras Bay, has been in active operation since the early part of 1925 and its tankage facilities, principally 80,000-bbl. tanks, considerably enlarged. A dock runs out into the water 3,500 feet. The shallow-draft tankers unload closer to the shore, the unloading berth or inner dock being about 2,200 feet, and the ocean tankers load at the outer dock.

The tank farm is situated on the shore at an elevation of about 100 feet. The shallow-draft tankers pump the oil, in unloading, from the dock to the tanks. The loading of the ocean tankers is entirely by gravity.

### Direct to Northern Markets

Since regular shipments of Venezuelan crude were started by the Gulf, the tankers have been carrying the oil to the company's Port Arthur, Tex. refinery, for topping. In his annual report for 1925, W. L. Mellon, president of the Gulf Oil Corp., stated the company's production on its lake shore concessions in Venezuela was running from 15,000 to 25,000 bbls. a day, and he pointed out that the Bayonne plant was being constructed to take care of Venezuelan crude, so it can be moved direct to the northern markets.

The distance from Venezuela to Port Arthur and from Venezuela to Bayonne, J. N., which is across New York Bay from New York City, is about the same. By shipping direct to Bayonne, the Gulf eliminates one operation of unloading and loading, and subtracts the re-shipment distance from Port Arthur to Bayonne.

Work on the Bayonne refinery began about eight months ago. Initial operation began the middle of February and runs have been increased until at the present time the plant is operating at about half its final capacity, that is, at about 10,000 bbls. a day.

The first shipment of Venezuelan crude to the Gulf's Bayonne plant arrived in January, a cargo of 74,000 bbls. Two cargoes of about 80,000 bbls. each were received in March and similar quantities were apparently received in April and May.

With the Gulf shipments of Venezuelan crude to the Gulf Coast and to the Atlantic Coast and with the Lago Oil & Transport Co. now shipping all of its production to the United States, Venezuelan crude is now a big factor in competition with Mexican fuel oil. The Lago (Pan American-Standard of Indiana interests) is shipping to its Destrehan, La., plant, where the topping is done, and fuel oil and gasoline is shipped coastwise to Atlantic terminals and marketing centers.

### To Increase Runs

Except in more or less isolated cases, Venezuelan crude has not been handled regularly by Atlantic Coast refineries, but as production in Venezuela increases other large plants, particularly those which are handling Mexican crude and the companies which are actively in the fuel oil market, will run increasing quantities of the Venezuelan product. The Standard Oil Co. (New Jersey) has run some Venezuelan crude. The New England Oil Refining Co. operated on Venezuelan crude for some time and is now understood to be handling this product.

Latest Venezuelan production figures showed the Gulf to be producing 20,000 bbls. a day and the Lago 18,000 bbls. a day. For the month of March, Gulf production averaged 17,000 bbls. a day and Lago, 16,000 bbls. daily. Total Venezuelan production is running about 102,000 bbls. a day.

The Gulf and Lago production represents substantially what Venezuelan crude is being shipped regularly to the United States. Until recently the Lago was shipping half its production to England but with the expiration of its foreign contract the oil has been diverted so that all is sent to the United States.

The entrance of the Gulf in the refining field on the Atlantic Coast probably has more significance as regards its fuel oil activities rather than gasoline marketing, in as much as the plant is being confined to the handling of Venezuelan crude, which is essentially a fuel oil, and as no cracking operations are planned. Nevertheless, gasoline derived from the Venezuelan crude will substantially augment the company's supplies for the eastern territory.

Virtually all the large refining companies marketing in the East have now established refineries along the north Atlantic Seaboard, with the exception of The Texas Company and the Pan American Petroleum & Transport Co. This refinery development has, however, been pronouncedly in the direction of a concentration on gasoline production, and in this respect the Gulf plant, as stated, differs from the general trend.

Such refineries as those of the Standard Oil Co. (New Jersey), Tide Water Oil Co., Atlantic Refining Co. and the Sun Oil Co. have greatly expanded their cracking equipment. The Sinclair Refining Co. and the Pure Oil Co., which have entered the eastern gasoline market on a large scale formerly received the bulk of their product from their Gulf Coast plants. Last year Sinclair opened a 12,000-bbl. refinery at Marcus Hook, outside of Philadelphia. This is essentially a gasoline plant, equipped with Isom cracking units.

The Pure Oil Co. has remodeled and expanded its Marcus Hook refinery, which is equipped with Cross cracking units, and will supply a greater part of its eastern gasoline demands from this plant. The Crew-Levick Co. (Doherty interests) is making a modern gasoline plant out of its Petty's Island, Philadelphia, refinery.

# Questionnaire On Burning Oils

## Bureau of Mines Seeks Information on Grades From Refiners, Jobbers and Marketers. Question Raised at Oil Board Hearing

By Charles E. Kern

*New York Bureau, The Oil and Gas Journal, Room 543, 30 Church St., New York*

WASHINGTON, D. C., June 14.—Oil heaters for domestic heating have become a large problem and the United States Bureau of Mines has decided to get together all available information respecting this subject. At the present time it is believed the use of oil burners is being doubled each winter, as that form of heating again comes into use.

There has been no survey of the industry to determine the number of oil burners now in use or the quantity of fuel oil being used for that purpose. The United States Bureau of the Census has been contemplating including a survey of the oil burners in use in this country in its investigations, but nothing has been actually started by that branch of the Government.

When the Federal Oil Conservation Board was in session here, W. C. Teagle, president of the Standard Oil Co. of New Jersey, and Herbert Hoover, Secretary of Commerce, during the open forum had some discussion of this subject. Secretary Hoover undertook to draw out some information concerning fuel oil availability with a bearing on the domestic oil burner, and Mr. Teagle then stated he was not in possession of statistics in respect to fuel oil which was the only commodity about which the industry was ignorant when it came to stating the uses for which it was consumed.

Mr. Teagle promised to have his statistical department get together for the use of the oil board, figures along this line which will include all the uses of fuel oil.

### Bureau of Mines Acts

The United States Bureau of Mines, seeking especially information on oil burners, the quality and quantity of fuel oil needed to supply them, has designated Albert Thompson Coumbe, Jr., to conduct this investigation under the direction of H. H. Hill, Chief Petroleum Engineer.

The Bureau of Mines is receiving many inquiries from people who desire to know whether fuel oil, suitable for domestic heating, will be available during the next two or three years, and in order to reply intelligently to these inquiries, the bureau will shortly send out a questionnaire to 300 refiners and to about 650 jobbers and marketers. The bureau also expects through the activity of Mr. Coumbe to make personal calls on some of these people, especially those who occupy outstanding positions in the trade and whose replies to the questionnaire are either lacking or regarded as inadequate.

No one appears to know at present how much fuel oil goes for domestic oil heating or where it goes. There have been estimates of the number of burners in use ranging from 250,000 to 500,000, but it is believed here these figures are far too high. It is believed this is caused in part by the fact that these statistics include kerosene heaters, which are not to be classed as mechanical oil burners.

If the number of oil burners should be accepted as approximately 250,000 and the quantity of fuel oil consumed be estimated at 3,000 gallons per burner per annum, the result would be a total consumption of such fuel oil of almost 19,000,000 bbls., which it is conceived is entirely too high. As a matter of fact, estimates that have been made here do not seem to warrant a belief that more than 4,000,000 bbls. of fuel oil per annum are used for domestic oil heating. This estimate is based on very inadequate information that has been gathered.

### Trend in Demand

The fuel oil used for domestic oil heating is dispensed under many trade names such as kerosene, kerosene distillate, gas oil, furnace oil, but it is generally oil testing from 38 to 40 degrees Baume A.P.I.

In the forthcoming survey the Bureau of Mines will endeavor to find out what is the trend in demand for this oil, whether it is for a heavier or a lighter oil and what gravity of oil the refiners will be able to supply during the next year or two. They will also wish to know whether refiners prefer to have the Government put out certain definite specifications for oil intended for these trade purposes. At the present time there is

(Continued on Page 108)

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# The Recognized Standard of Wrought Pipe for Oil and Gas Purposes

The extraordinary demands which have been placed upon pipe by deep and rapid drilling, the extensive use of the rotary system and other severe requirements of modern practice, call for material of unquestioned dependability.

Those who select "NATIONAL" Pipe for drilling purposes, automatically make provision for both usual and unusual conditions, for "NATIONAL" Pipe has those qualities which give the necessary durability.

The more important of these qualities are high tensile and torsional strength, and resistance to collapse—which alone give "NATIONAL" Pipe a strong preference in the oil and gas field. But these qualities are combined with specially designed joints —material that is resistant to corrosive influences—and adaptability to all sorts of working and installation conditions. This means less chance and more certainty when "NATIONAL" Pipe is used.

From Well, to Pipe Line, to Refinery—whatever the need may be—there's a "NATIONAL" Pipe for the purpose.

## NATIONAL TUBE COMPANY, PITTSBURGH, PA.

GENERAL SALES OFFICES: FRICK BUILDING

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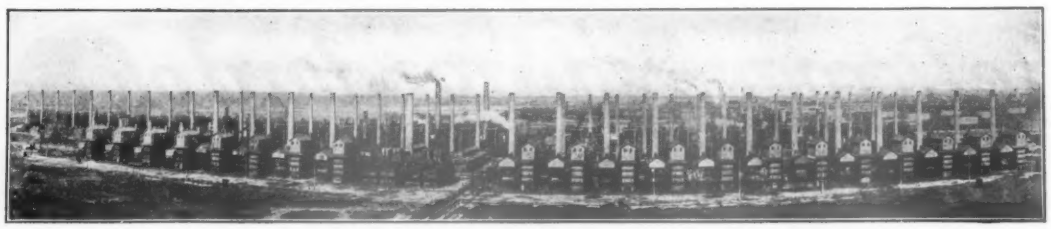
# The Holmes-Manley *Cracking* Process



56 Units at the Port Arthur Works of The Texas Company

ALL of the Naphtha produced in 1925 from these units was finished by chemical treatment—*without steam stilling*

# The Holmes-Manley *Cracking* Process

No re-running of the Naphtha is necessary with this process

The Licensee receives:—

1. *A Proven Process*
2. *Complete Technical Service*
3. *The Benefit of Future Developments*

Licenses Granted by

THE TEXAS COMPANY, U. S. A.

*Apply to*

R. C. HOLMES, *President*

17 Battery Place, New York, N. Y.

# Tetraethyl Regulations Approved

## Two Fuels on Market Contain More Lead Than Ethyl Gasoline. Benzol Declared to Have Additional Hazard

By Charles E. Kern
*Washington Bureau, The Oil and Gas Journal*

WASHINGTON, D. C., June 14.—Proposed regulations for the manufacture and blending of tetraethyl lead and distribution of ethyl gasoline received their final approval at a conference of state and territory health officers with the Public Health Service. These regulations also include the sanitation of automoblile garages, service and filling stations.

Assistant Surgeon General Warren E. Draper presided at this conference and Surgeon J. P. Leake, of the Public Health Service, in charge of the tetraethyl lead investigation, made the report which had received the approval of the committee. The meeting was held at the headquarters of the Public Health Service and was largely attended. These regulations which were distributed in tentative form some months ago have been thoroughly revised to meet various views presented to the committee by public health officers throughout the country.

The report made by the committee in connection with the draft of regulations covers 61 typewritten pages and the accompanying tables number 57, giving in detail the analyses in connection with all investigations.

The important point of the investigation, the result of which has previously been made known briefly through a publication in The Oil and Gas Journal is that ethyl gasoline can be used without danger to the public health and under proper regulations without danger to the health of those engaged in its manufacture.

The committee in presenting its regulations urged upon all health officers to do everything possible to have state legislatures enact proper legislation for the enforcement of these regulations. As the case now stands the company putting out this antiknock fuel has agreed to abide by the regulations so that wherever it is used restrictions will be imposed to eliminate any danger.

### Other Fuel Hazards

One of the important elements of the conference was in the statement that new types of motor fuel are being put on the market with unknown hazards and two of which, the names not being given, are said to contain more lead than does tetraethyl gasoline.

The conference urged continued vigilance through watchfulness and investigation to avoid danger from antiknock fuels, which according to views expressed are just making their initial appearance and which may be expected to grow in numbers and in general use.

Surgeon Leake opened his report with a review of happenings since February 1, 1923, when the distribution of gasoline containing tetraethyl lead started. He referred to the fatalities at Bayway, N. J., and ill results reported elsewhere and the action of the Surgeon-General, May 20, 1925, in calling a conference to consider the public health aspects of this question.

In the making of this investigation Surgeon Leake laid great stress upon its thoroughness to the point of devising new methods for the more accurate determination of tetraethyl lead poison. The methods of quantative analysis used in this investigation, he said, were much more delicate than any heretofore employed. This investigation really extended over two years of the use of the fluid. To obtain unbiased information they had assured witnesses that their statements would be confidential and in no way could prejudice them in minds of their employers. In fact the statements were so guarded that even the investigators did not know the identity of the witnesses, excepting the case of the particular investigators who took the statements and designated them by numbers.

Surgeon Leake said arrangements have been made for continuing this investigation so if there is any possible hazard from more prolonged exposure that will be ascertained before more cases of poisoning occurs.

### Fewer Mixing Stations

Dr. L. R. Thhompson, suhrgeon, Public Health Service, in charge of industrial hazards, said that originally when tetraethyl lead was sold it was sold in small distributing tanks about one liter in size and the mixing was carried on in many stations. Under the present regulations there would not be more than 30 mixing stations in the United States and probably only one or two manufacturing places in the country. This would reduce the hazard by reducing the number of men exposed. As an instance of this kind he said the Standard Oil Co. of New Jersey would have only six mixing stations and it holds physical examinations periodically throughout the period of the employes' service.

Doctor Thompson said there are a number of other motor fuels among which is the benzol blend and the Public Health Service through the National Safety Council carried on an investigation last year in respect to benzol.

"We found there is a wide distribution of benzol in the United States," said Doctor Thompson, "so we have an additional hazard in such motor fuels because benzol does produce various blood changes and benzol can be used for cleaning purposes while tetraethyl lead cannot. The fact that benzol evaporates makes the subject of sanitation in garages very important."

Doctor Thompson referred to the extending use of high compression engines. This he believed would contribute to a reduction of carbon monoxide as there would be a smaller amount of carbon monoxide produced by combustion in the motors.

"I want to bring out the fact," said Doctor Thompson, "that we have a lot of work before us outside of straight gasoline. In Colorado and Pennsylvania, two motor fuels are being sold about which no one seems to know very much except that the fuel contains lead in larger quantities than does tetraethyl lead. So while we are talking about one commercial product, we must remember there are other products to be looked after."

### State Action Needed

Dr. A. J. Chesley of Minnesota said the most important thing that health officers could do was to have these regulations adopted in their respective states. He said they were simple and practical of application. They should go further than that, however, and impress upon their representatives in Congress the fact that this investigation has only been started.

"We will use new types of motor fuel with unknown hazards and it is necessary for us to set up machinery so as not to have any more hazard than has been experienced in this initial case," said Doctor Chesley. "It is very important to have this work carried on as a routine matter hereafter."

Doctor John E. Monger of Ohio also stressed the idea for the necessity of continuing these investigations.

Doctor Leake read the portion of the committee report of the investigation of health hazards from tetraethyl lead gasoline referring to reported injuries from ethyl gasoline which he said summed up the essentials of the committee's views.

"In no case was any evidence obtained as to harmful effects from ethyl gasoline," he said, reading from this report. Continuing the report stated:

### Where Longest Used

"Perhaps the most important evidence as regards the possible harmful effects of ethyl gasoline was obtained by inquiry in the regions where it had been longest used. This is largely subjective, and therefore difficult or impossible to evaluate. City and state health authorities and labor leaders, who are in a position to know if the use of tetraethyl lead, which is now universally known to be very dangerous in its undiluted form, had caused any known serious results when diluted in gasoline in their respective jurisdictions, gave absolutely negative evidence as to any such harmfulness. It might easily happen that on account of labor turnover and the disinclination of susceptible persons to remain at work where they were subject to a possible hazard of this sort, those who had been injured would not be found by an examination such as that detailed in the preceding sections of this report. Each employe examined was therefore questioned confidentially as to any rumors which he may have heard, or any knowledge or suspicion which he might have, regarding injuries or accidents from the use of ethyl gasoline.

### Imparial Inquiry

"It was fortunate that the workers examined appreciated the impartial nature of this inquiry and the confidential terms of the examination. Many stories were elicited of the very serious poisonings which occurred at the blending plant where lead tetraethyl was mixed with halogens to form concentrated ethyl fluid. This plant was located near Dayton, Ohio. This, of course, was not the information being sought, and the subject's attention was directed to the use of ethyl gasoline itself. From the persons examined, or in some other way, very rarely, some story was brought out in which some one was said to have thought it possible that ethyl gasoline was in some way to blame for injury. These stories, when obtained at the time of examination, were put down on separate slips of paper and not in connection with the subject's name or identification in any way. It was made clear to the subject that he could not be brought into any connection with the information given.

"As a control over this method of eliciting information, similar questions were asked of the subjects in group E, those exposed to a definite lead hazard. The response in this case was overwhelming. All who had been in the plants any length of time knew of repeated cases of lead poisoning which had occurred, and in some departments these were said to be very frequent—several in a week or in a single day.

"One filling station attendant in an-

(Continued on Page 84)

## REGULATIONS FOR MANUFACTURE OF TETRAETHYL LEAD AND FLUID

No. 1. No person shall be employed without adequate instructions as to the nature of the hazard and the precautions to be taken.

2. Each worker shall have a periodical physical examination which shall consist of such physical and other tests as are indicative of the absorption of tetraethyl lead and shall include, as a minimum, the following items:

(a) Examination of blood for stippling by carefully trained workers, using positive and negative controls, without knowledge of the source of the slides; this examination shall be once a week for the first three weeks, and bimonthly thereafter.

(b) Semi-monthly contact with plant physician for informal statement as to general health.

(c) Bi-monthly weight, stripped.

(d) Bi-monthly systolic and diastolic blood pressure estimation, while sitting.

(e) Bi-monthly hemoglobin estimation by Dare's hemoglobinometer. Exact records of these examinations shall be kept, and persons showing gradually increasing amounts of stippling, sudden development of stippling, or other marked deviation from normal, shall be promptly excluded from tetraethyl lead work, irrespective of whether or not such finding may be indicative of lead poisoning. All parts of the plants where lead in any form is used shall be subject to sanitary measures to prevent collection and dissemination of lead dust.

4. Separate ventilation systems shall be provided for the manufacturing apparatus, and for the air of the rooms, the outlets of the latter being located near the floor of each room, and all external inlets and outlets being so situated as to avoid dustiness and appreciable contamination of the air around the plant.

5. Daily inspection shall cover efficiency of ventilating systems, all joints, valves and gaskets of manufacturing apparatus, and adequacy of pressure-hose respirators.

6. All containers of ethyl fluid or tetraethyl lead shall be labeled as to exact content and danger and shall conform to the regulations of the Interstate Commerce Commission. These containers shall be carefully tested for leaks and shall bear a plainly legible label stating that they are to be closed tight immediately when emptied, without cleansing, and sent back to the plant.

7. Kerosene or other material used for cleansing the used containers of ethyl fluid or tetraethyl lead shall be placed in the containers by means of a closed system with air vents to outside air and with adequate ventilation.

8. The filling shall be performed by means of a closed system with air vent from the container to the outside air, and with adequate ventilation.

9. A dye shall be added to ethyl fluid in sufficient amount to give staining qualities to the ethyl gasoline, to deter individuals from using it for cleansing or other similar purposes.

10. Reports shall be made monthly to the appropriate officer of the state concerned covering the following points:

Number of workers employed at beginning of month.

Number of workers employed at close of month.

Number of new workers.

Number of workers separated from tetraethyl lead work on account of results of examinations.

Number of definite cases of poisoning.

(Continued on Page 120)

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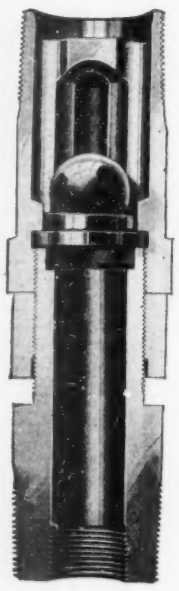

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It is made from solid bar steel.

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It is equipped with oversize N E C O Chrome Steel Ball and seat.

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It will handle one-third more fluid than the regular type standing valve.

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## DISTILLATE PRICES FOR COMING SEASON

(Continued from Page 68)

Condition of cases of poisoning previously reported so far as known.

**Proposed Regulations for Mixing**

1. The maximum content of tetraethyl lead in commercial ethyl gasoline shall be in the proportion of 1:1260 by volume for commercial tetraethyl lead, or 1:1300 for Pb $(C_2H_5)$ 4 C. P.

2. Mixing ethyl fluid with gasoline except for certain specific requirements such as research, military and naval use, and air mail service shall be done only at the main distribution centers and in not less than tank car lots. Adequate provision shall be made at each such center for thorough mechanical distribution of the ethyl fluid throughout the gasoline, and the efficiency of such distribution shall be controlled by the analysis of samples.

3. The locations of these centers and the names of persons engaged in mixing shall be reported to the State Department of Health of the state of employment.

4. As few persons at each center as practicable shall be employed for this work.

5. No person shall be engaged for mixing until adequately instructed as to the mechanics of mixing, the dangers and the precautions to be taken.

6. The distributor of ethyl fluid shall provide a special corps of adequately trained instructors and service men.

7. All mixing shall be done with maximum ventilation practicable under weather conditions existing at the time.

8. Operation of the pumps shall be instantly stopped at the appearance of a leak or other defect and no attempt shall be made to repair or disconnect the system until a qualified man takes personal charge of it.

9. Floors of all places where any possibility of spilling is present are to be provided with drains and proper facilities for making possible a complete flushing out of all spilled fluid, or in their absence provision shall be made for chemically neutralizing any spillage as it occurs.

10. No bulk mixing station shall be dismantled or disconnected for repairs except by a qualified man.

11. Kerosene or other efficient means of preventing skin absorption of tetraethyl lead, and washing facilities shall always be conveniently available.

12. The rules and instructions affecting the employes shall be posted in a conspicuous place where the ethyl fluid is being handled.

13. The distributor of ethyl fluid shall, with the advice of the United States Public Health Service, select a representative group of at least 40 men exposed to the hazard of mixing, representing the entire area of distribution. This group shall serve as an index of the hazard of mixing. Monthly for the first three months, and every four months thereafter this group of employes shall have an examination, which shall consist of:

(a) Examination of blood for stippling, by carefully trained workers, using positive and negative controls, without knowledge of the source of the slides.

(b) Examination of fecal samples of lead.

(c) Report as to general state of health.

(d) Weight, stripped.

(e) Blood pressure estimation, diastolic and systolic, when sitting.

(f) Hemoglobin estimation by Dare instrument.

Exact records of these examinations shall be kept.

14. The results of the examinations shall be reported promptly to the surgeon general of the Public Health Service.

**Distribution of Ethyl Gasoline**

1. Each filling station shall have prominently displayed at the pump, or in other conspicuous place, the following warning or one of similar effectiveness: "Ethyl gasoline containing tetraethyl lead, to be used as motor fuel only, and not for cleaning or any other purpose."

2. Suitable leaflets shall be available at all filling station where ethyl gasoline is sold, for distribution on request. These leaflets shall describe the possible dangers and precautions to be taken in the use of ethyl gasoline.

3. Containers of ethyl gasoline sold to the general public shall be labeled: "Ethyl gasoline containing tetraethyl lead. To be used for motor fuel only, and not for cleaning or any other purpose."

**Regulations for Garages and Stations**

1. Automobile garages or repair shops holding more than five cars and all public service stations and filling stations for automobiles should be registered with the local health department.

2. In addition to doors and to window ventilation in summer, automobile garages, repair shops, service stations, and filling stations should have permanently operative ventilation at least equivalent to that given by an opening or openings at ceiling level free to the outside air, but protected from down drafts, with cross-section of 0.2 per cent of the floor space available for cars, together with floor space available for cars, together with an opening or openings for inlet near floor level of corresponding effectiveness, both arranged to give positive dilution of exhaust gases as generated. This is to be taken as a minimum, special conditions requiring greater permanent ventilation.

3. Automobile garages, repair shops, service stations, and filling stations should be kept reasonably clean and free from dust by means of flushing out and moist sweeping or vacuum cleaning.

4. Automobile garages, repair shops, service stations and filling stations should keep conspicuously posted a copy of these regulations with the following statements in large type:

"Automobile exhaust gas is dangerous. Motors should not run longer than 30 seconds unless the car is in motion or the exhaust is directly connected to the outside air. Liquids sold as motor fuel, except ordinary gasoline, should be used only as motor fuel, and not for cleaning or other purposes. The fumes from the evaporation of even ordinary gasoline may be injurious."

## TETRAETHYL REGULATION APPROVED BY COMMITTEE

(Continued from Page 82)

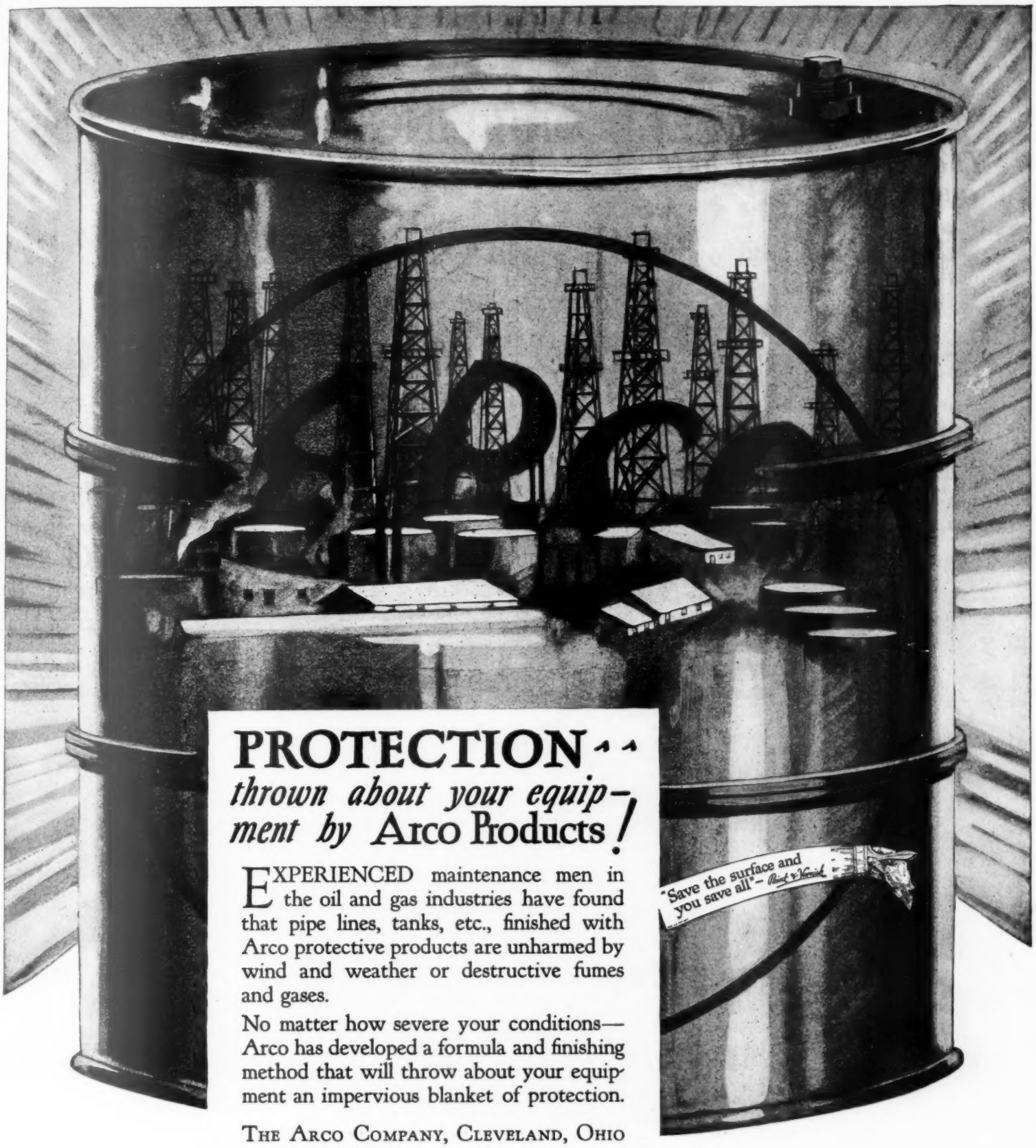
other city was said to have died, and his death was connected by some people with the use of ethyl gasoline. This city was visited. A physician present at the operation stated that death was clearly from purulent appendicitis.

"One woman was supposed to have been made sick by the use of ethyl gasoline in the golf stick factory where she worked. She was seen and it was found that no ethyl gasoline was used in this factory, and that her illness, from which she had recovered, was duodenitis with jaundice.

"One filling station attendant was said to have suffered from the handling of ethyl gasoline. He was visited and said that he had had a badly enlarged heart for many years and that he had stopped work because he became short of breath. The sleeplessness from which he suffered from time to time was caused by this shortness of breath. He had to remain upright to breathe with any comfort.

"One man was said to have had a nervous breakdown from the use of ethyl gasoline in an aviation field. He was visited, his own physician interviewed, and a detailed history of the case was taken. The correct diagnosis appeared very clearly to be epidemic encephalitis, as was agreed without question by all the physicians and consulting neurologists who had to do with his case. No ethyl gasoline was used at that aviation field.

"A newspaper account of a fatality from inhaling fumes from the tank of an automobile in a city near Dayton was investigated. The best information was

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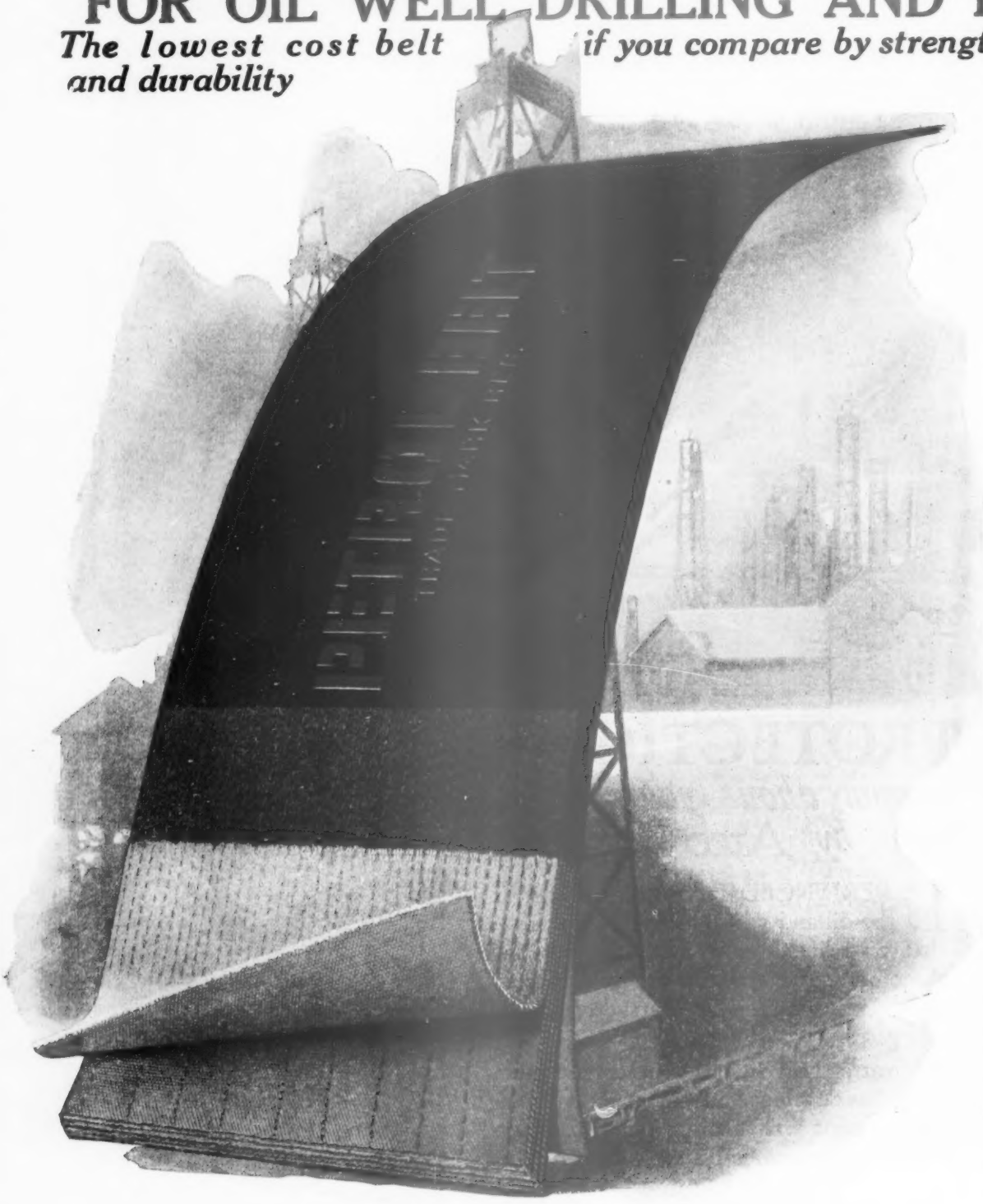


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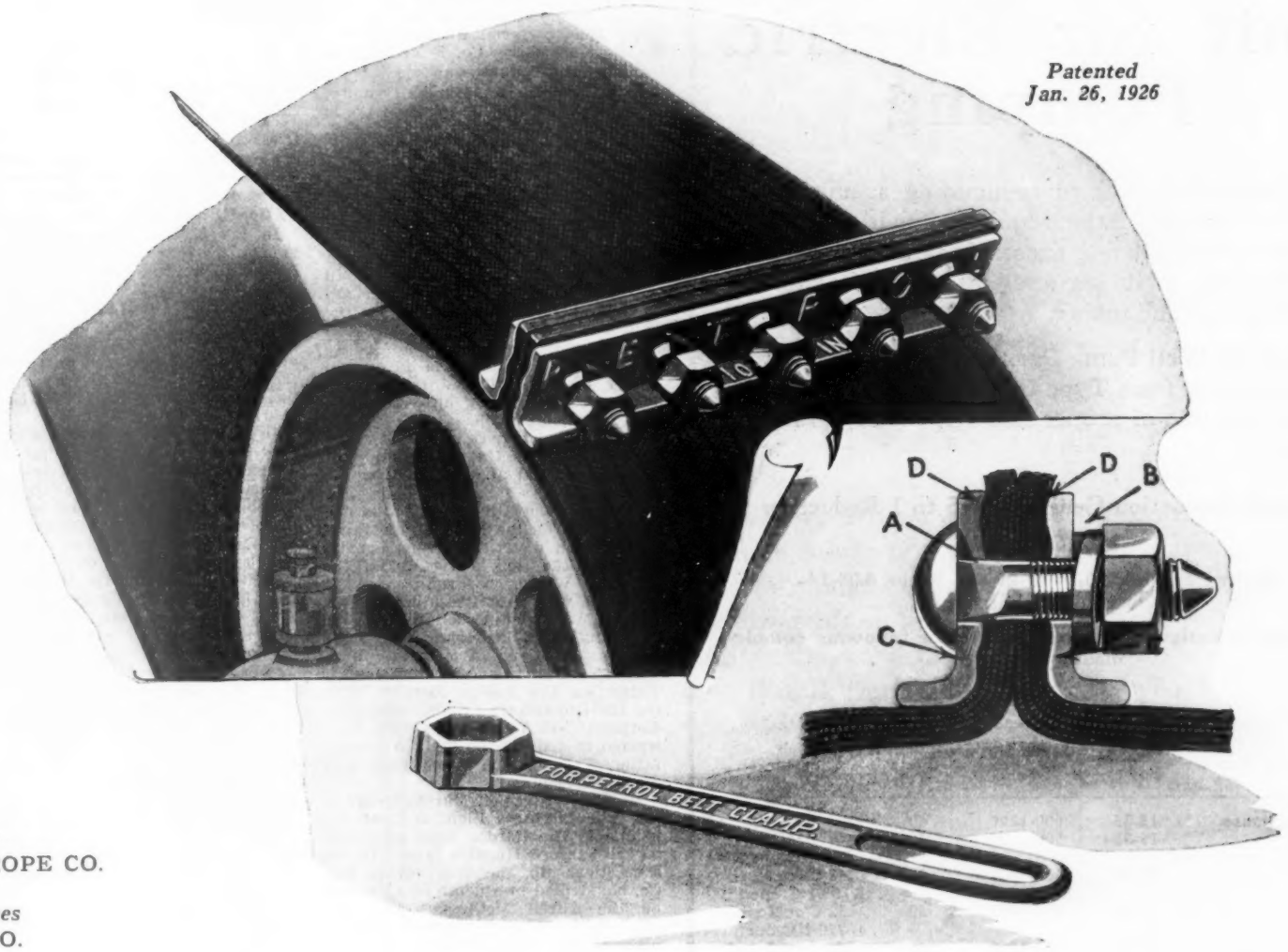


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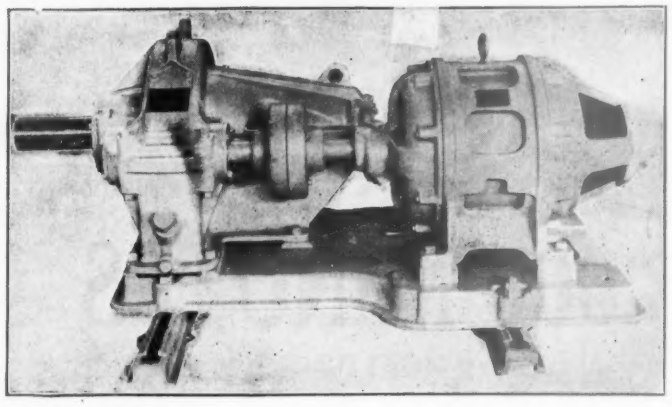

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**Rating, 15-35 or 20-50 or 25-65—Ratio, 4.95-1—Reduction, Single**

**This unit is designed to accommodate the following complementary motors:**

| Make of Motor | Horse Power | Style No. Speed | Cycle | Frame |
|---|---|---|---|---|
| Westinghouse | 15-35 | 600-1200 | 60 | 654C |
| | 15-35 | 500-1000 | 50 | 654C<br>760.1 C open |
| | 20-50 | 600-1200 | 60 | 752 C enclosed<br>760.1 C open |
| | 20-50 | 500-1000 | 50 | 752 C enclosed<br>770.1 C open |
| | 25-65 | 600-1200 | 60 | 762 C enclosed |
| General Electric | 30-15 | 1200-600 | 60 | OMT 336-7 |
| | 30-15 | 1000-500 | 50 | OMT 336-7 |
| | 50-20 | 1200-600 | 60 | OMT 346 |
| | 50-20 | 1000-500 | 50 | OMT 346 |

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that no ethyl was sold in this city. A visit to the father of the boy who died, revealed, however, that the father had used ethyl gasoline in his own car, but it was found that the gasoline with which the boy was cleaning his brother's car when he died was not ethyl gasoline at all but gasoline containing another added product. This product was present in such a small quantity that it would seem likely that the boy's death was due not to that product but to the fumes of gasoline itself.

"In no case was any evidence obtained as to harmful effects from ethyl gasoline."

## EASTERN FIELDS

(Continued from Page 68)

Call & Co.'s No. 3 on the Floyd Moore farm is a gasser in the Berea grit.

**Starting and Drilling Tests.**

On Rush run, Smithfield district, Roane county, Godfrey L. Cabot has rigs completed for first and second tests on the J. B. Webb and W. H. Harless farms. In Grant district, Monongalia county, the Carnegie Gas Co. has drilled to a total depth of 4,485 feet on the W. B. Hess farm. In the same county, Battelle district, the Pittsburgh & West Virginia Gas Co. is due in the sand at a test on the Clark Tennant farm. In Cass district the Union Utilities Co. is drilling on the John Bailey farm.

In Liberty district, Marshall county, the Manufacturers Light & Heat Co. is rigging up at a second test on the S. D. McConaughey farm. In Birch district, Braxton county, the Ohio Fuel Oil Co. is due in the sand on the James Bard farm.

In Sheridan district, Calhoun county, the Hope Construction and Refining Co. is building the rig for a test on the Okey Parsons farm. In the same district, the Chemical Oil Co. has abandoned its location on the Bennett-Sanders farm. In Lee district, Martin Crawley has started to drill on the L. A. Sturm farm. In Center district, Gilmore county, the same party is rigging up on the Anthony N. Moore farm.

In Walton district, Roane county, the Clifton Oil & Gas Co. has part of the rig material at a location on the G. M. Summers farm. In Geary district, the Stump Oil & Gas Co. is due in the sand on the Eliza Stump farm. In Sheridan district, Calhoun county, W. H. Bickel has a rig up on the James S. Wolverton farm.

On the waters of Reese creek, Barboursville district, Cabell county, one mile southwest of Grant Sipe Co's test on the R. J. Armstrong farm, Shipe & Olifant have started to drill a test on the Joseph Merritt farm. On the Guyandotte river, McComas district, C. C. Wolfe and others have started to drill on the B. L. Browning farm. This location is one mile west of developments.

In Liberty district, Marshall county, the Manufacturers Light & Heat Co. is due in the Gordon sand at a test on the Sanford Huggins farm. In the same township, the Waynesburg Gas Co. has drilled to a depth of 3,100 feet on the Alfred McClusky farm and shut down. In Church district, Wetzel county, the Manufacturers Light & Heat Co. has started to drill a second test on the Hannah Stump farm. In Center district, Gilmer county, the Hope Natural Gas Co. is building a rig on the J. N. See farm. In the same district, the same company has a rig up on the R. M. Marshall farm.

**Southeastern Ohio**

In Newton Township, Licking County, L. A. Patton & Co. have a 4-bbl. pumper in the Berea grit at No. 3 on the Smith-McCormick farm. In the same township, the North Fork Oil Co.'s No. 26 on the James McKinney farm is the same kind of a pumper. The test on the W. R. Butler farm is a duster. In Perry Township, the Hope Construction & Refining Co. is due in the Clinton sand at a test on the Wesley Martin farm. In Section 23, Jefferson Township, Noble County, Joseph Saling and others have a very light pumper at a second test on the John A. Miller farm. In Section 28, Enoch Township, Casper Schott & Co. have a 2-bbl. pumper in the Berea grit at a second test on the Clarence Hupp farm.

**Athens County**

In Section 29, Alexander Township, Athens County, the Biddle Oil & Gas Co.'s No. 3 on the John F. Biddle heirs' farm is a 4-bbl. pumper in the Berea grit. In Section 19, same township, Cook and others are due in the sand at a test on the N. Brooks farm. In Section 29, the same parties have abandoned their test on the W. E. Cressen farm. It was dry in the Berea grit. In Section 34, Harmon & Co. are due in the sand at a test on the John Lax farm.

In the northeast quarter of Section 15, Aurelius Township, Washington County, O. O. Kinsey has a very light pumper in the Berea grit at No. 11 on the N. C. Smithson farm.

In Section 14, Jackson Township, Perry County, the Holliday Oil & Gas Co. and others have started to drill No. 5 on the Samuel C. Paxton farm. In the southwest quarter of Section 14, Sutton Township, Meigs County, the Meigs & Summers Oil & Gas Co. is drilling on the Homer Irwin farm.

In Alexander Township, Athens County, the Biddle Oil & Gas Co. is drilling No. 5 on the John F. Biddle farm. C. H. Beasley is drilling No. 10 on the W. D. Whaley farm. In Athens Township, Gross and others are drilling on the B. Irwin farm. In the same township, Gross and others are drilling a second test on the Athens State Hospital property.

**Good Producer in Holmes County**

In Lot 5, Hardy Township, Holmes County, the Empire Gas & Fuel Co. has completed in the Clinton sand a second test on the Mary E. Bridges farm. The well produced 140 bbls. the ensuing 24 hours. In Monroe Township, same county, the C. B. Bell Oil & Gas Co. drilled through the Berea grit a test on the C. B. Bell farm. No oil and only a little gas was developed at this location. It will go into the discard.

In Brown Township, Knox County, the East Ohio Producing & Refining Co. has completed and shot in the Berea grit No. 5 on the George A. Richert farm. It is a 2-bbl. pumper. In the southwest quarter of Section 21, York Township, Morgan County, the Ohio Fuel Supply Co. completed and shot in the same formation a second test on the Matilda Epley farm good for 5 bbls. a day.

**Duster in Noble County**

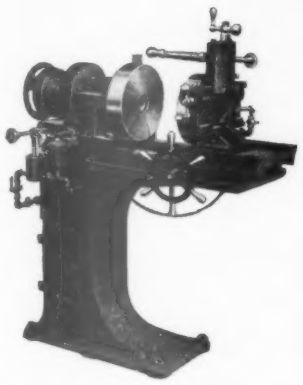
In the southeast quarter of Section 25, Center Township, Noble County, A. H. Yearin and others have a duster in the Buell Run sand at a second test on the E. C. Brown farm. Only 15 feet of sand was drilled through at this location.

In Fearing Township, Washington County, the Rocher Oil Co. has completed in the first Cow Run sand a test on the Charles Rocher farm. It is good for 5 bbls. a day. In Newport Township, the Peoples Banking & Trust Co., trustee, has completed in the same formation No. 44 on the William Reader farm. It is a very light pumper.

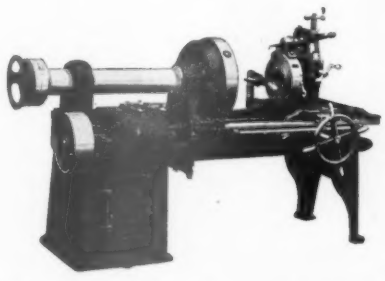
**Fair Producer in Licking County**

In Lot 24, Newton Township, Licking County, F. M. Rugg & Co.'s No. 5 on the Clinton S. McKimmey farm is good for 25 bbls. a day in the Berea grit. This is much better than the average well in that locality.

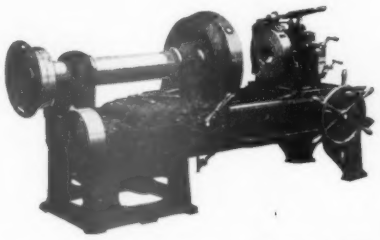
In Section 2, Franklin Township, Licking County, Moore & Adams have completed a test on the Parker Wolfe farm. It is a very light pumper in the Berea grit. In the southwest quarter of Section 21, Jackson Township, Knox County, the Arkansas Fuel Oil Co. has completed in the Berea grit No. 16 on the L. V. Dugan farm, good for 5 bbls. a day. In the southwest quarter of Section 22, Seneca Township, Noble County, the Ohio Fuel Supply Co. completed and shot in the Berea grit a test on the Garfield Watson farm, a light gasser. In Section 9, Hopewell Township, Licking County, the



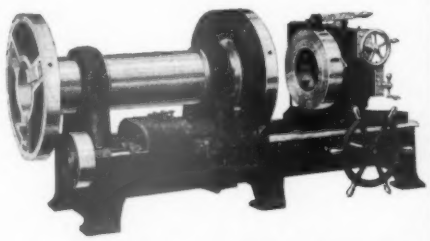
*No. 2 B & K Improved Pipe Machine. Pipe capacity ¼" to 2" diameter.*



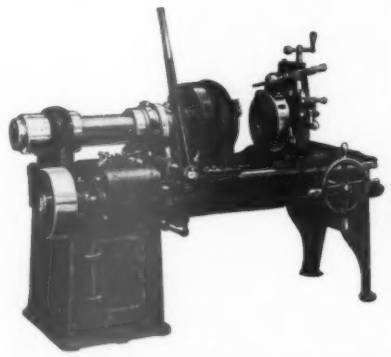
*No. 2 and No. 3 Peerless Improved Pipe Machine. Capacities ¼" to 2" and ¼" to 3" respectively.*



*No. 4 Peerless Improved Pipe Machine. Gear box drive capacity 1" to 4".*



*No. 10 and No. 12 Duplex Improved Pipe Machine. Capacities 3½" to 10" and 4" to 12" respectively.*



*No. 2 and No. 3 P. D. Q. C. Improved Pipe Machine. Capacities ¼" to 2" and ¼" to 3" respectively.*

# Threads...
## Better and Cheaper

Fifty years of experience with pipe threading problems have made possible the high state of mechanical efficiency expressed in B & K Pipe Threading Machines. For strength and serviceability they are unexcelled. Some of the earliest B & K machines—built fifty years ago—are still in service.

All B & K Pipe Threading Machines are regularly equipped with Peerless dies having curved eccentric relief. Thus friction is minimized and more threads with less power made possible.

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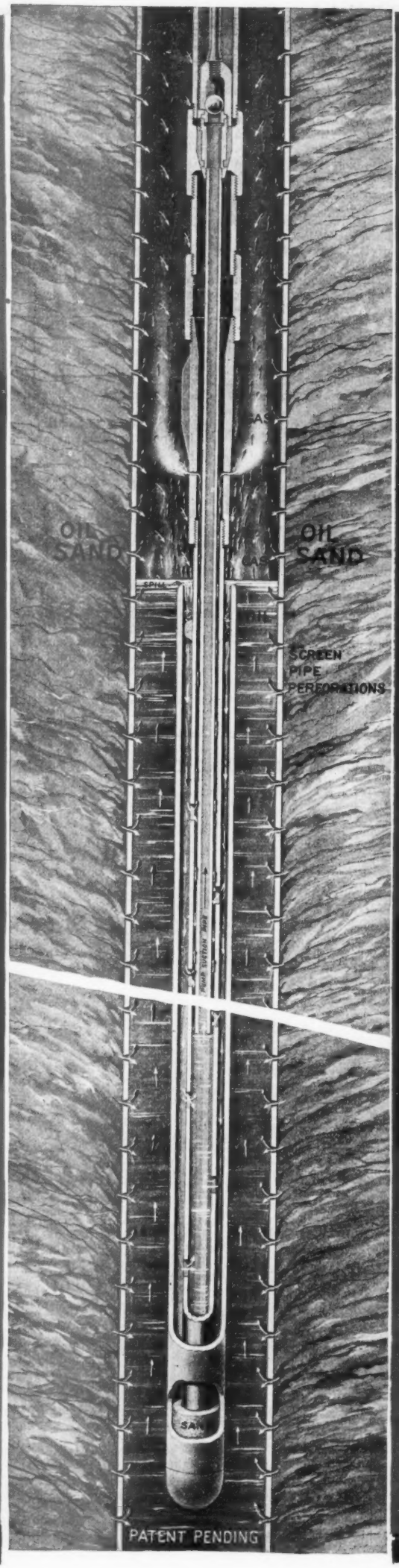
**Edwardsville, Illinois**

PEERLESS B&K DUPLEX P.D.Q.C.

Good News
is here

# Regan Production Booster

*Enters the*
**FIELD**
**-To put the pep into lazy oil wells....**




# Separates
## sand *and* gas *from* oil

You can immediately boost the production of your pumping wells by installing this efficient Booster. It completely separates sand and gas from oil; it eliminates gas pockets; it prevents emulsification of oil and water; it increases the production of both gas and oil; it eliminates plunger, ball and seat trouble.

Can be run into any oil string that the working barrel will run in. Sand precipitates to the bottom and is trapped.

Increases pump production from 10 to 200 barrels per day. The device pays for itself within a few days.

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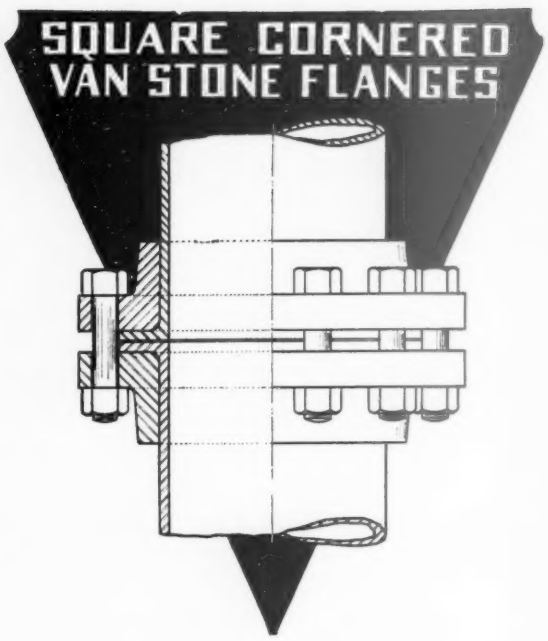


For 150, 250, 300, 400, 600 and 900 pounds steam working pressures, conforming to the new American Engineering standards. Write!

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VALVES FLANGES FITTINGS

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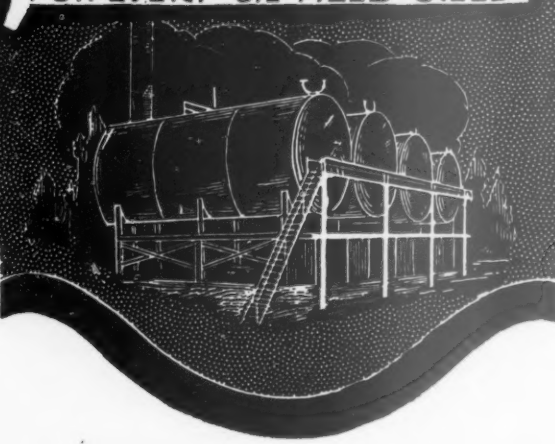
FOR EVERY OIL FIELD NEED




Pure Oil Co. has started to drill a second test on the L. M. Cartnal farm.

**Morgan County**

In the northeast quarter of Section 29, York Township, Morgan County, the Pure Oil Co. completed and shot in the Berea grit No. 9 on the G. J. Fye farm good for 15 bbls. a day.

In the southwest quarter of Section 20, Reading Township, Perry County, the Planet Oil Co. and others have completed and shot in the Clinton sand a test on the O. J. Miller farm showing for a 9-bbl. pumper. In Section 73, Salem Township, Washington County, W. C. Patterson's test on the Floyd L. Bell farm is through the Macksburg 800-foot sand and dry. In Hopewell Township, Licking County, the Pure Oil Co. is drilling No. 6 on the Jacob S. Loughman farm.

**Allegheny County, Pa.**

In Findley Township, in Allegheny County, the Clifton Oil & Gas Co. has a gasser in the Gordon sand at a test on the S. G. Matchett farm. In the same township, the same company is drilling a second test on the same farm. In Marshall Township, Pinkerton & Neuhart have a 3-bbl. pumper at a test on the C. Huggins farm. The same parties have a rig up for a test in the William Dean farm. In the same township, L. A. Pinkerton and others are drilling in the sand and fishing at a test on the George Willoughby farm. In McCandless Township, Nickless & Miller have a gasser at a test on the Aulston farm. In Ohio Township, Martin & Co. have a gasser at a test on the Speer farm.

**Greene County Gauges**

The late gauges of some of the old producers in Greene County are as follows: Consumers Fuel Co.'s No. 1 Alfred Rutan (agitated), 230 bbls.; No. 1 Thomas Anderson, 75 bbls.; Natural Gas Co. of West Virginia's Nos. 1 and 2 Louis Powers, 35 bbls. respectively and the same company's No. 3 T. F. Rutan, 40 bbls.

In Aleppo Township, Greene County, the Carnegie Natural Gas Co. has a gasser in the Gordon sand at a test on the Lewis Anrill farm. In Morris Township, the same company has a gasser in the same formation at a test on the J. L. Hoge farm. In Center district, the Greensboro Natural Gas Co. has a gasser good for 1,000,000 feet at a test on the J. J. Mitchell farm.

K. W. Ingham, one of the best known oil scouts, has just returned from a visit to Mississippi, and made a very thorough inspection of wildcat operations in that state. He said 45 miles north of Jacksonville the Transcontinental Oil Co. is down 1,000 feet in Madison County. It is using the rotary system in putting down the well.

Near Conway, Leake County, Charles Haskell, former governor of Oklahoma, has the rig up for a test. At Alta, Kosciuski County, B. B. Jones has the rig up and ready to start the drill. Mr. Ingham is somewhat optimistic as to the future of Mississippi as an oil-producing state.

## JOSEPH W. QUINN DIES

Joseph W. Quinn, aged 48 years, tool foreman of the Carter Oil Co., western division, died recently at Duncan, Okla., after an illness extending over six months. Mr. Quinn was especially well and favorably known in the oil fields. He had been associated with the Carter Oil Co. and the parent organization, the Standard Oil Co. of New Jersey for 18 years, seeing service in Roumania and China in addition to work in this country. The deceased was a brother of Thomas Quinn, widely known drilling contractor.

## PETROLEUM SUPPLY AND DEMAND IN APRIL

Compiled by Charles E. Bowles from the latest revised figures of the U. S. Bureau of Mines.

| | Feb., 1926 | Mar., 1926 | Apr., 1926 | Apr., 1925 |
|---|---|---|---|---|
| **Current Supply—** | | | | |
| Domestic Crude Oil | 54,564,000 | 60,669,000 | 59,868,000 | 61,431,000 |
| Import, crude and refined | 5,687,989 | 8,736,298 | 7,519,783 | 6,888,819 |
| Total current supply | 60,251,989 | 69,405,298 | 67,387,783 | 68,319,819 |
| **Demand—** | | | | |
| Domestic and export, crude and refined | 59,889,819 | 69,457,688 | 77,526,408 | 64,476,369 |
| Total change in crude and refined storage | 362,170 | *52,390 | *10,138,625 | 3,833,450 |
| **Source of Change in Storage—** | | | | |
| 1—Pipeline and tank farm | *2,375,000 | *1,323,000 | *11,504,000 | 2,448,343 |
| 2—Crude oil at refineries | *347,000 | 1,216,000 | 2,530,000 | *158,590 |
| 3—Foreign crude not at refineries | 94,000 | *118,000 | *46,000 | 324,000 |
| 4—Refined products at refineries | 2,990,170 | 172,610 | *1,118,625 | 1,219,697 |
| Total change in storage | 362,170 | *52,390 | *10,138,625 | 3,833,450 |
| **On a Daily Average Basis—** | | | | |
| The current supply was | 2,151,857 | 2,238,881 | 2,246,259 | 2,277,327 |
| The current demand was | 2,138,922 | 2,240,571 | 2,584,213 | 2,149,545 |
| Average daily surplus or shortage | 12,935 | *1,690 | *337,954 | 127,782 |
| **Total Crude and Refined in Storage—** | | | | |
| (a) Pipeline and tank farm: | | | | |
| East of California | 257,009,000 | 255,646,000 | 251,530,000 | 275,205,000 |
| In California, light crude | 44,877,000 | 43,996,000 | 38,634,000 | 44,542,573 |
| In California, heavy crude and fuel oil | 86,761,000 | 87,682,000 | 85,656,000 | 60,506,301 |
| (b) Crude at refineries east of California | 30,434,000 | 31,650,000 | 34,180,000 | 32,453,907 |
| (c) Foreign crude not at refineries | 532,000 | 414,000 | 368,000 | 723,000 |
| Total crude stocks | 419,613,000 | 419,388,000 | 410,368,000 | 413,430,781 |
| (d) Refined products at refineries: | | | | |
| Gasoline | 45,206,167 | 46,103,238 | 45,874,405 | 40,973,265 |
| Kerosene | 6,857,000 | 6,997,786 | 7,014,357 | 10,349,374 |
| Fuel oil, east of California | 21,444,524 | 20,267,476 | 19,773,357 | 20,493,001 |
| Lubricating oil | 7,908,952 | 7,640,071 | 7,368,476 | 6,904,868 |
| All other products | 42,471,765 | 43,052,447 | 42,911,798 | 39,547,517 |
| Total refined stocks | 123,888,408 | 124,061,018 | 122,942,393 | 118,268,025 |
| Grand total in storage | 543,501,408 | 543,449,018 | 533,310,393 | 531,698,806 |

If the fire loss of 8,215,000 bbls. had not occurred in California in April there would still have been a reduction in total stocks in the United States of 1,923,625 bbls.

Comparison of this decrease of 1,923,625 bbls. in April (if there had been no fire loss in California) with the increase of 3,833,450 bbls. in total stocks in April, 1925, clearly indicates an improvement in the crude storage situation in the United States.

Stocks of fuel oil east of California April 30, 1926, were 426,000,000 gallons lower than their peak of 1,256,000,000 gallons September 30, 1925.

From a peak of 472,371,000 gallons June 30, 1925, kerosene stocks gradually declined to 287,618,000 gallons at the end of January, 1926, since which time they have been slowly increasing.

During the last 16 months stocks of lubricating oil have ranged between 278,600,000 gallons June 30, 1925, and 322,176,000 gallons February 28, 1926 and stood at 309,476,000 gallons at the end of April.

Total crude oil stocks east of California reached their peak—278,644,000 bbls.—in May 1925, and have declined every month thereafter to 251,530,000 bbls. April 30, 1926.

The peak of gasoline storage in 1925 was reached in March—41,600,000 bbls. Thus far in 1926 the peak was in March—46,103,000 bbls. Between these two peaks the lowest point was reached in September, 1925 with 36,056,000 bbls.—a drop of 4,500,000 bbls. from peak storage.

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B & B Patentsteel and other good drilling lines can be made promptly to order to suit conditions in your particular field. Write for Catalog K2 and name of nearest distributor of B & B Drilling Lines.

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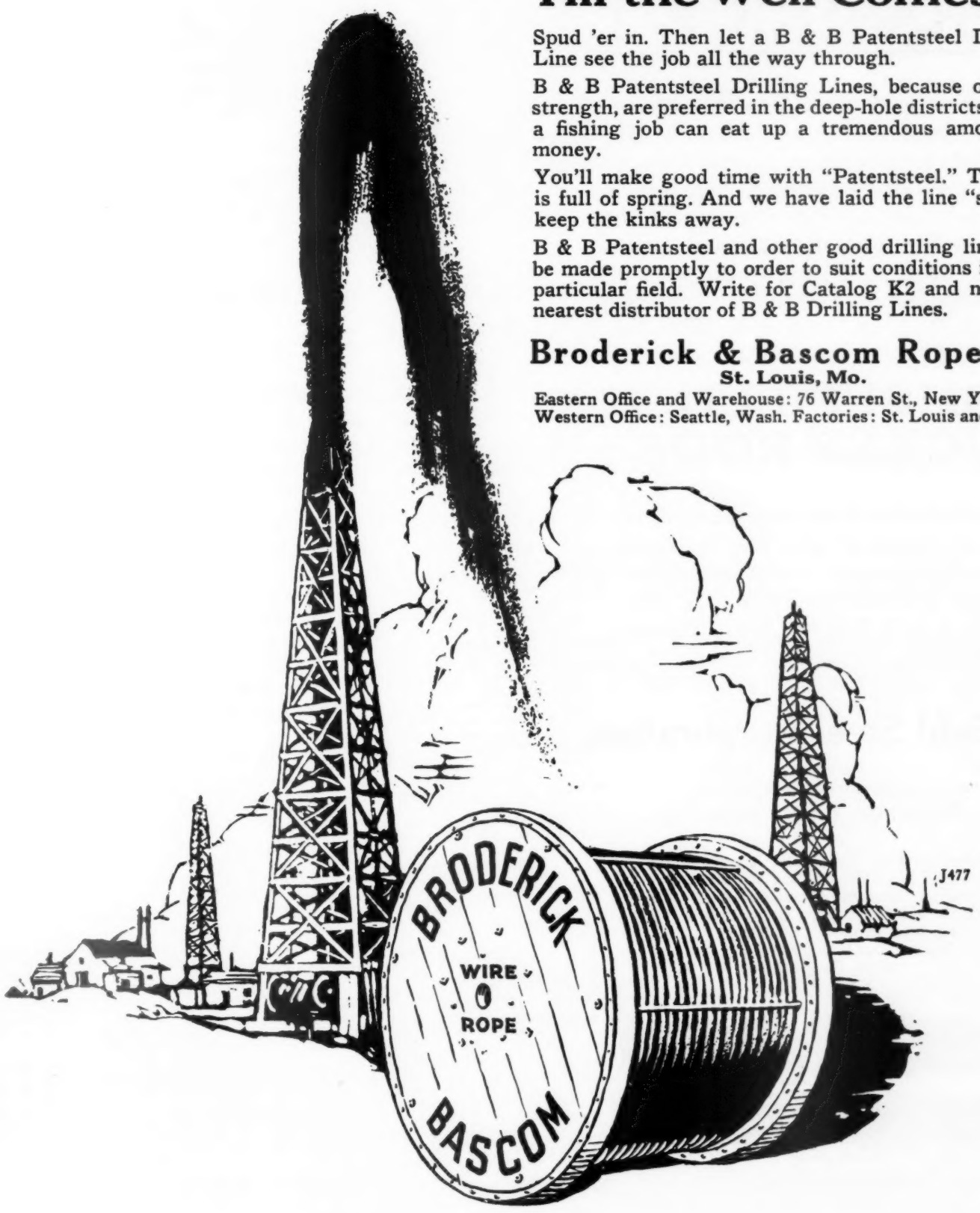

# Choose the *Right* rod then STANDARDIZE

IT is a wise producer indeed who carefully checks the durability and economy of the Sucker Rods he purchases. Checks them first from the standpoint of their operating life, pin breakage, time consumed in joining—and also his ability to get additional supplies promptly. Such checking, we are sure, will prove the advisability of choosing the Sheffield Sucker Rod—and standardizing thereon.

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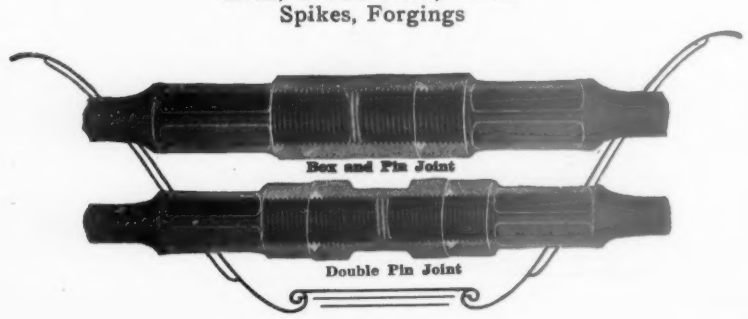




# NEW RECORD IN AUTOMOBILE OUTPUT IS BEING ESTABLISHED THIS YEAR

WASHINGTON, D. C., June 12.—Automobile production in April was 402,574 4-passenger cars and 53,268 trucks, of which 382,631 passenger cars and 50,272 trucks were made in the United States and 19,943 passenger cars and 2 996 trucks were produced in Canada, according to Department of Commerce.

April production compared with 399,376 passenger cars in March and 393,262 in April, 1925, while truck production compared with 48,705 in March and 47,983 in April last year.

For the first four months of the year production was 1,421,742 passenger cars and 175,586 trucks against 1,195,282 passenger cars and 155,845 trucks in the first four months last year.

Figures are based on returns from 172 manufacturers for recent months, 65 making passenger cars and 124 making trucks (17 making both passenger cars and trucks) and presents a slight revision of totals of previously shown, due to the receipts of corrections in the original reports. Data for earlier months include 75 additional manufacturers now out of business, while April data for 15 small firms, mostly truck manufacturers, were not received in time for inclusion. Figures on truck production include fire apparatus, street sweepers and buses.

**Monthly Passenger Car Output Since 1922**

| | 1926 | 1925 | 1924 | 1923 | 1922 |
|---|---|---|---|---|---|
| January | 284,153 | 213,851 | 293,824 | 228,861 | 84,192 |
| February | 335,639 | 253,955 | 343,460 | 260,325 | 112,756 |
| March | 399,376 | 334,214 | 357,045 | 327,046 | 157,567 |
| April | 402,574 | 393,262 | 346,495 | 351,628 | 202,567 |
| May | ..... | 384,548 | 286,324 | 358,657 | 238,463 |
| June | ..... | 366,510 | 225,079 | 344,001 | 268,501 |
| July | ..... | 360,124 | 255,528 | 202,347 | 190,868 |
| August | ..... | 223,517 | 255,232 | 318,857 | 252,796 |
| September | ..... | 274,227 | 263,528 | 302,347 | 190,868 |
| October | ..... | 408,017 | 290,881 | 338,481 | 219,921 |
| November | ..... | 337,435 | 204,343 | 288,810 | 217,955 |
| December | ..... | 286,141 | 182,099 | 279,862 | 210,692 |
| Total | ..... | 3,835,801 | 3,262,764 | 3,702,391 | 2,385,010 |

**Monthly Commercial Vehicle Output Since 1922**

| | 1926 | 1925 | 1924 | 1923 | 1922 |
|---|---|---|---|---|---|
| January | 32,735 | 28,202 | 30,741 | 20,510 | 10,000 |
| February | 40,878 | 34,481 | 32,910 | 23,292 | 13,855 |
| March | 48,705 | 45,179 | 36,444 | 36,645 | 20,637 |
| April | 53,983 | 47,983 | 37,948 | 39,678 | 23,455 |
| May | ..... | 45,718 | 35,314 | 45,719 | 24,916 |
| June | ..... | 38,150 | 29,067 | 42,480 | 26,990 |
| July | ..... | 41,870 | 26,391 | 31,740 | 22,537 |
| August | ..... | 37,849 | 28,647 | 32,219 | 25,308 |
| September | ..... | 60,482 | 31,960 | 29,651 | 19,933 |
| October | ..... | 45,012 | 32,475 | 31,540 | 22,461 |
| November | ..... | 40,048 | 27,905 | 29,191 | 22,535 |
| December | ..... | 34,487 | 27,542 | 28,883 | 20,916 |
| Total | ..... | 500,461 | 377,344 | 391,548 | 253,552 |

## EGYPT CONTINUING GOOD OIL CUSTOMER

By Charles E. Kern
*Washington Bureau,*
*The Oil and Gas Journal*

WASHINGTON, D. C., June 12.—Proceeding with the rapid advancement in automotive vehicle imports and registrations, Egypt's mineral lubricating oil imports advanced approximately 40 per cent in 1925, states a report to the department of commerce from Trade Commissioner Richard A. May, Alexandria.

Gasoline delivered from the Suez refinery, the principal source of motor fuel supply, and imported from abroad increased nearly 50 per cent to 30,298 tons, valued at 370,997 pounds in 1925. Kerosene importation in 1925, 228,563 tons and 9,061 cases valued at 1,056,320 pounds, exceeded 1924 by about 15 per cent.

In lubricating oils and greases the United States continues to enjoy the greater part of the business, although unusually large gains are recorded in imports of these items from the Straits Settlements, British Borneo and Germany. Russia accounts for at least 60 per cent of Egypt's kerosene imports, while Rumania supplies nearly one-half the benzine. American interests however, supply a large share of the refined petroleum receipts from these countries. Egypt's imports of fuel oil (mazout) actually declined about 8 per cent in 1925 to 99,223 tons valued at 345,055 pounds.

## FRANKLIN CHAIRMAN ON A. P. I. RESERVATION

W. C. Franklin, vice president of the Tidal Oil Co., Tulsa, has been named chairman of the committee on hotel reservations for the annual meeting of the American Petroleum Institute to be held in Tulsa. All requests for hotel reservations during the meeting should be made to Mr. Franklin.

A. V. Bourque, secretary of the Association of Natural Gasoline Manufacturers is assistant chairman of the committee. Other members of the committee are B. G. Creager, convention secretary of the Tulsa Chamber of Commerce and representatives of the Hotel Tulsa and Hotel Mayo at Tulsa.

## ITALY'S OIL IMPORTS INCREASING SLOWLY

By Charles E. Kern
*Washington Bureau,*
*The Oil and Gas Journal*

WASHINGTON, D. C., June 12.—Italian imports of petroleum products continued to advance in 1925, although the proportion of increase was not so large as in the preceding year, states a report to the Department of Commerce from the office of the Commercial Attache, Rome. Imports for 1924 increased by almost 30 per cent and advanced about 11 per cent in 1925.

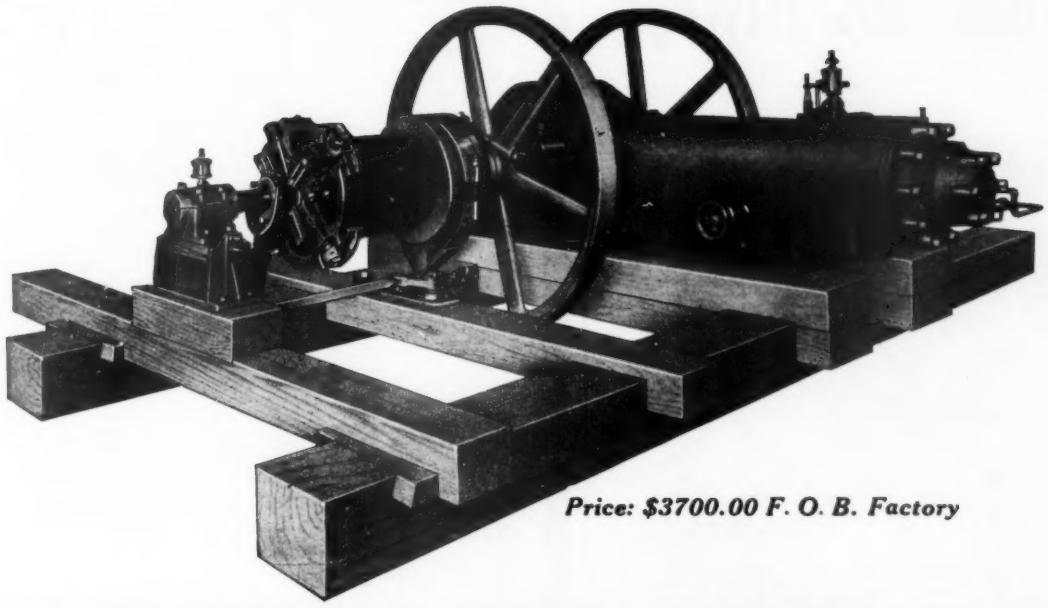
During the past three years the values of the total imports increased from $30,000,000 in 1923 to $31,500,000 in 1924, and $33,000,000 in 1925.

Crude oil imports, which showed a decrease in 1924, had a considerable advance in 1925 carrying the total well beyond that of 1923. Kerosene imports had a slight decrease and while there was an increase in the importation of residuum it was slight in comparison with that shown in 1924. Imports of paraffin wax have decreased gradually throughout the three years.

The United States was the principal source of the gasoline, kerosene, lubricants, residuum and paraffin wax, and the increase of the American share of the crude oil imports was marked. Russia and the United States supplied nearly two-thirds of the crude importation of 1925, both countries showing an unusual increase over 1923 and 1924, while Mexican crude has not appeared on the records since 1923. Russia has supplied gasoline, kerosene and residuum to Italy during the past three years, the increases in its contributions of all these products being considerable.

While the total of paraffin wax imports has had a marked decrease, and imports from America decreased in 1925 it is noticeable that Belgian contributions of this commodity have had a steady increase throughout the three years. Belgian lubricants have had an increasing market in Italy over that period, but Belgium is not among the principal sources of other petroleum products.

# Conservation Service



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## THE OIL INDUSTRY LEADS IN CONSERVATION
## THE KEYNOTE OF

**1925** **1926**

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Do you want the names of these Contractors, as well as the names of others using two, three, four and five?

THINK OF IT—The fuel cost per hour to operate a FRANKLIN OIL DRILLING ENGINE is less than one-half the cost of operating a Ford Automobile, running thirty miles per hour, and one-half the cost of Gas where you buy it. Also a great saving in water, which is frequently a greater problem than fuel. Makes better drilling time than with any other cable tool unit.

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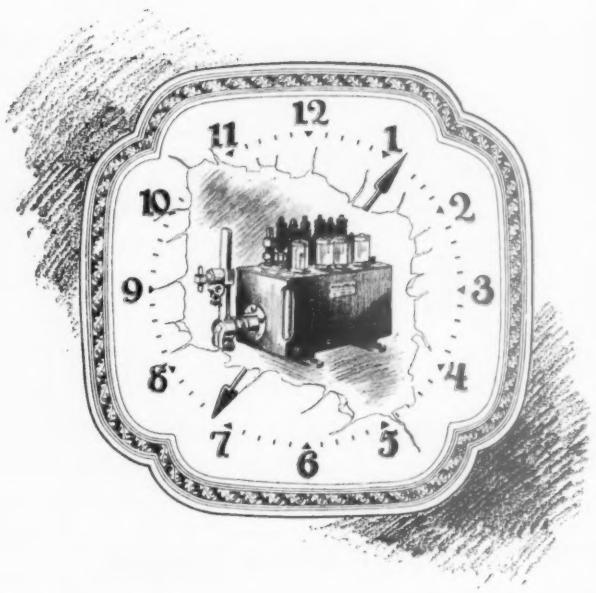

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***Standard of the Oil fields***

**McCord Radiator & Mfg. Co., Detroit**

**LUBRICATOR DIVISION**


## COMPUTING LEAKAGE NATURAL GAS LINES

(Continued from Page 72)

cept through existing leaks. The leakage causes the pressure in the line to fall. The change in pressure is obtained with a dead weight gauge. Approximate results may also be obtained from readings on a good spring test gauge. Numerous tests show that the dead weight gauge is more sensitive to small changes in pressure than spring gauges.

The temperature of the gas in the line is observed simultaneously with each pressure reading. Temperature changes affect the pressure exerted by a given quantity of gas "shut in" a line, and since the rate of leakage from a closed system is directly proportional to the rate of pressure drop, fluctuations in temperature must be considered.

### Nomographic Charts

The writer has prepared two nomographic charts, which are arranged to give the leakage rate of gas from lines of various sizes. The charts are intended for ready reference in making field tests, and give a convenient method for quick computation of the leakage losses from lines.[2] The yearly rate of leakage per mile of line, and the equivalent yearly leaakge per mile of 3-inch line, can be determined from the charts. The leakage is expressed in thousands of cubic feet of gas, at a temperature of 60 degrees Fahrenheit and a pressure of 30 inches of mercury at 60 degrees Fahrenheit.

In making a leakage test, the temperature of the gas in the line either remains constant or fluctuates during the test. One chart, which will be designated as No. 1, is used to determine the leakage when there is no change in temperature during the test. Both charts are used if the temperature fluctuates. The following example illustrates the method of using the charts.

Assume: Pressure drop = 0.10 pounds per minute.

Line temperature = 75 degrees Fahrenheit; no change during the test.

Size of line = 6 inches nominal (actual internal diameter 6.065 inches.)

Using the constant temperature chart (No. 1) connect the point indicating an 0.10 pound drop on scale 1 with the 75-degree point of scale 5. The intersection of a line connecting these two points and scale 2 indicates a value of 0.98 pound. This is the pressure drop corrected to the standard temperature of 60 degrees Fahrenheit. The point thus found on scale 2 is connected with a point on scale 6 that represents the actual internal pipe diameter of 6.065 inches. The intersection of the line joining these two points and scale 3 indicates the leakage in thousands of cubic feet of gas per year per mile of line. In this example, shown by a dotted line on the chart, the annual leakage is 3,600,000 cubic feet per mile of 6-inch line at the existing line pressure. In order to find the equivalent leakage from a mile of 3-inch line, connect the 3,600,000 point of scale 3 with the internal pipe diameter, 6.065 inches, on scale 7. The intersection of the line joining these two points and scale 4 gives a leakage of 1,820,000 cubic feet yearly per mile of 3-inch line.

To illustrate the second case, assume:

Pressure at start of test = 300 pounds per square inch, absolute.

Pressure at finish of test = 290 pounds per square inch, absolute.

Temperature at start = 30 degrees

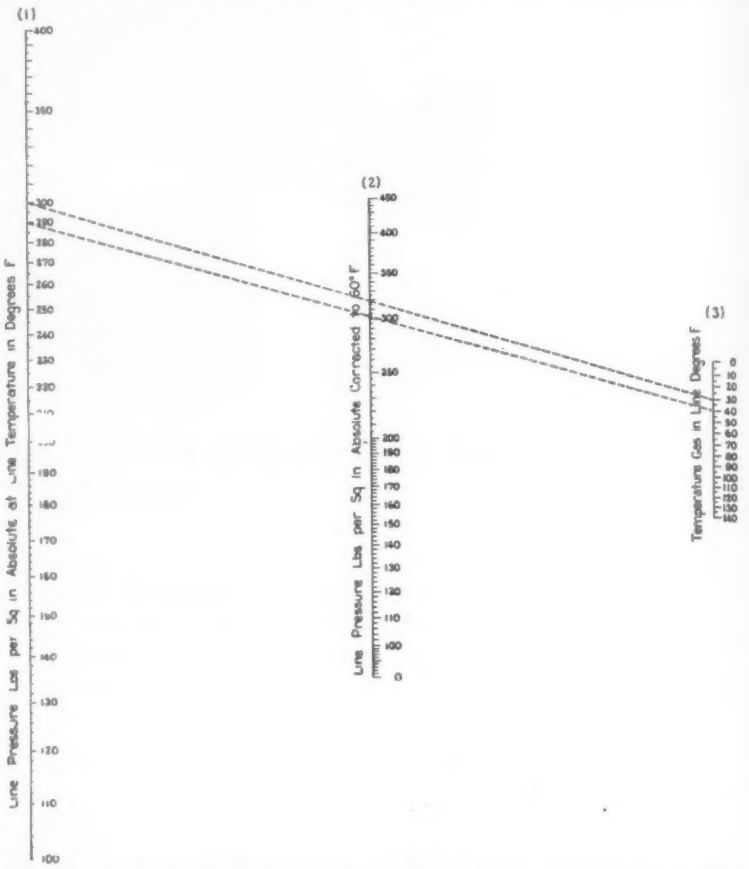
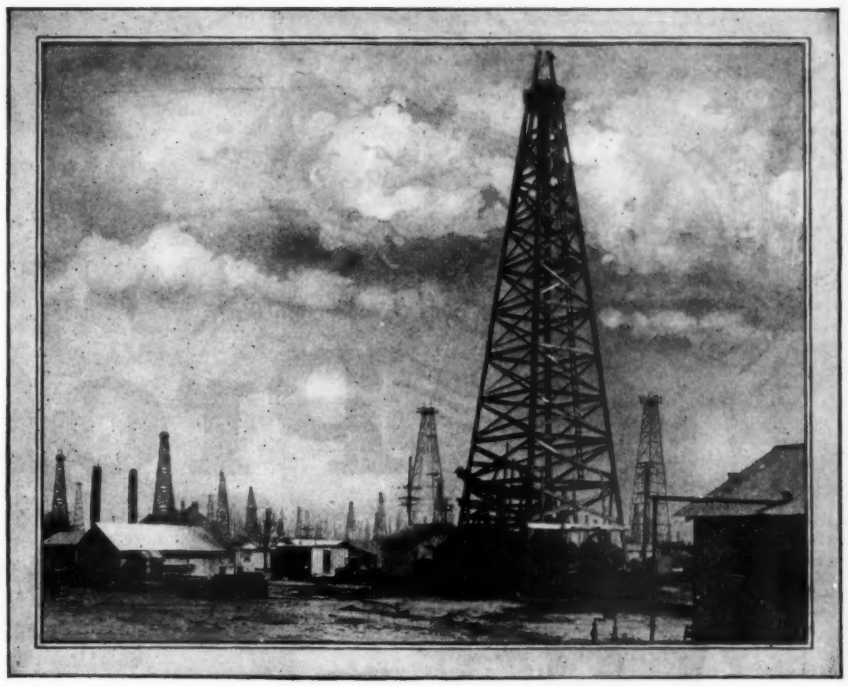

(1)
(2)
(3)
Line Pressure Lbs per Sq In Absolute at Line Temperature in Degrees F
Line Pressure Lbs per Sq In Absolute Corrected to 60° F
Temperature Gas in Line Degrees F
Line Pressure

**CHART NO. 2—For Determining Leakage Losses From Gas Transmission Lines at Varying Temperatures**

**(This chart is used for determining the pressure drop corrected to 60 degrees Fahrenheit where the temperature changes during time of test. It is to be used in conjunction with Chart No. 1.) Procedure for using chart: Connect the initial line pressure on scale (1) with the initial line temperature on scale (3). Read the initial line pressure, corrected to 60 degrees Fahrenheit at the intersection on scale (2). Next connect the final line pressure on scale (1) with the final line temperature on scale (3). The final line pressure corrected to 60 degrees Fahrenheit is then read at the intersection on scale (2). The difference between the corrected and final pressure drops is the value used for determining the leakage. This valve divided by the time is used as the corrected rate of pressure drop on scale (2) of Chart 1. From this point proceed as outlined on Chart 1. Prepared by E. O. Bennett, natural gas engineer, United States Bureau of Mines, April, 1926.**

[2]Copies of these charts, of a size convenient for desk work can be obtained on application to the Publications Section, Bureau of Mines, Washington, D. C.



*Lindley No. 1, Wortham Field, Texas. Byers Tubing. In over one year not a single shut down on account of tubing trouble.*

# In a Field full of Crooked Holes
## *Byers Tubing sets unique record*

Look for the *Spiral Stripe* on Byers Pipe

*Also name and year rolled in metal*

THE Wortham field in Texas is considered very severe on tubing because of its many crooked holes. Under such conditions, the tough genuine wrought iron pipe shows itself to best advantage. Its metal is fibrous, rather than crystalline; hence it is like a wire cable in that it readily adjusts itself to bends without danger of fracture. Its ability to withstand constant vibration, shocks and strains has never been equalled by steel. That is why, for example, leading railroads equip cars and locomotives with Byers Pipe; and that is why Byers tubing, when put to severe test, invariably outlasts steel by many years.

Stroube and Stroube, Oil Operators, of Corsicana, Texas, have this to say about Byers tubing:

"In February, 1925, we equipped our Lindley No. 1 at Wortham with Byers genuine wrought iron tubing and have been using it every day without one moment's loss of time due to tubing trouble—indeed a remarkable record since the Wortham field is severe on tubing. We are highly pleased with the excellent service we are getting from Byers tubing at Wortham and elsewhere. We are equipping all of our wells with your tubing and gladly recommend its use to other producers."

As a means of preventing costly shutdowns and loss of production, Byers Tubing repays you manifold its slightly higher first cost.

*Ask for Catalog and Further Particulars*

**A. M. BYERS COMPANY**
*Established 1864* **Pittsburgh, Pa.**

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*Stocks Carried at*
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# BYERS Tubing
**GENUINE WROUGHT IRON**

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Trying to go through hard rock with the wrong tools slows up progress and increases costs on the job.

If a fishtail is used when it's rock bit digging—expensive delays and worn out equipment result. Faster drilling through hard rock, less wear and tear on equipment and more time spent with the bit actually at work in the hole are the features that make the Reed Rock Bit a time and money saver for contractors and operators.

## Reed Rock Bits

When you hit hard rock, run in a Reed Bit, and go on through.

**Reed Roller Bit Company**
HOUSTON LOS ANGELES

Fahrenheit.

Temperature at finish = 40 degrees Fahrenheit.

Duration of test 1 hour and 40 minutes (100 minutes).

Using the chart for varying temperature (No. 2) connect the initial pressure of 300 pounds per square inch on scale 1 with the 30 degree point on scale 3. The intersection of the line connecting these two points and scale 2 indicates a pressure of 320 pounds per square inch. This is the initial pressure corrected to 60 degrees Fahrenheit. The same procedure for the final pressure of 290 pounds per square inch shows a corrected pressure of 303 pounds per square inch. The difference between the corrected initial and corrected final pressures gives the pressure drop used to determine the leakage. In this example, the pressure drop, uncorrected for temperature difference, is 10 pounds per square inch. When the initial and final pressures are corrected to 60 degrees, from the actual temperature in the line, the corrected pressure drop is 17 pounds per square inch. The rate of pressure drop is obtained by dividing 17 pounds by 100 minutes (the duration of the test) and is 0.17 pounds per square inch per minute. The other chart (No. 1) then is used for determining the leakage rate as described in the first case.

The amount of gas lost by leakage from any given line is directly proportional to the rate of pressure drop in that line. Scale 2 of Chart 1 shows rates of pressure drop that range from 0.01 pounds per square inch per minute to 1.0 pounds per square inch per minute. If the readings taken during a test indicate a pressure drop of 2.5 pounds per square inch per minute, which does not appear on the scale, the problem is worked by considering the drop to be 0.25 pound per square inch per minute, which is on the scale. After the leakage rate is determined, it is multiplied by 10 and the correct value for a pressure drop of 2.5 pounds per square inch per minute is found. Similarly, the leakage rate for a pressure drop rate less than any shown on the scale is determined by calculating the leakage for a rate of pressure drop 10 times as large, which appears on the scale, and dividing the result by 10. In this manner large or small line losses are determined if the corresponding rates of pressure drop are known.

The charts are constructed upon the assumption that natural gas follows Boyle's Law in its relation of pressure to volume. This assumption is not strictly correct but no practical error results in this case.

The charts are intended for ready reference when field tests are made in order to give a convenient method of computing the leakage losses from lines.

## VETERAN PIPE LINE EXECUTIVE RETIRES

John E. Golden of Bradford, Pa., president of the Tide Water Pipe Co., Ltd., and for 46 years an employe or official of the company, has retired, and his place has been filled by the election of R. H. Jones of New York. The new president has been in charge of the Tide Water's ocean transport and New Jersey railroad systems.

The retiring president succeeded his brother, Andrew W. Golden, who also had a record of over 45 years with the company when he retired. The Golden brothers were greatly esteemed by the large operating force, to most of whom they were personally known, and the fact that they rose to the top in the affairs of the company is indication enough of the confidence placed in them by the directors.

John E. Golden started to work for the Tide Water pipe line December 28, 1880, as a pipeline walker. He recalls that on that day there was a foot of snow on the ground and the thermometer the night before registered 31 degrees below zero. His route covered a 5 mile hike through woods and fields and over high hills. Later when the line was extended his route covered 18 miles. This was in the Williamsport district, in Pennsylvania. He was advanced through many grades and learned pipe lining in all its ramifications and finally reached the pinnacle, the presidency, which only the service limit caused him to retire from.

The Tide Water pipeline extends from the Illinois oil fields east to Bayonne, N. J., passing through four states on its way to the seaboard and is one of the most important oil transportation lines in the country.

At the annual meeting of the directors on Thursday, June 3, the following officers were elected: R. H. Jones, president; George J. Hanks, vice president and general manager; W. J. Burker, secretary and assistant treasurer; J. Byron Deacon, treasurer and assistant secretary. The above named officers and a newly elected member, C. W. Morrison will constitute the board of managers.

## Shooting of Wells In Texas Panhandle Left to Operators

AMARILLO, Tex., June 12.—At a hearing held before Judge H. E. Bell of the Texas Railroad Commission at Amarillo this week, it was decided to leave the matter of shooting oil wells to the operators and their representatives. The matter of cementing the last string of casing in the wells was also made optional with the operators.

The most of the companies having production in the field were represented at the hearing, and testified to the various producing conditions which were encountered.

The hearing was a most important one and had great influence upon future developments in the Panhandle. The Railroad Commission has supervision of the oil and gas production in the state, and recently issued an edict forbidding the shooting of wells until such time as pipe line facilities were adequate to handle the oil produced. Owing to the difficulty encountered by the heavy volume of gas the commission had considered the advisability of ordering all operators to cement the last string of casing and insure a complete shut-off of the gas before penetrating the oil sand. This would be very detrimental to the owners if the well proved a small producer and it was desired to raise the casing and shoot the well.

At various areas in the field producing conditions differ greatly. In some localities a good volume of gas is found and in others very little, and with such a variety of problems it was considered impossible to issue a uniform set of rules governing the entire field.

The Railroad Commission believes that it is the desire of the operators to assist in the conservation of the mineral resources as much as possible, and feeling that the oil companies will devote their energies to the most efficient manner of producing the Panhandle oil it was decided to allow them to handle their wells in the manner which they deemed most advisable.

### NEBRASKA TEST 3,000 FEET

A test well being drilled by the Nebraska Oil Corporation near Chadron, Neb., is now nearly 3,000 feet deep after several oil and gas showings says a report in the Chicago Journal of Commerce. No visitors are allowed on the premises and the well is one of the "mystery" operations. A report the well would be abandoned is not verified.

### KERN RIVER DISCOVERER DIES

J. F. Elwood, credited as being one of the discoverers of the Kern River field, died at Sanger, Calif. recently, following a long illness. Together with his brother and father, he dug the first well on the Tom Means property in the eastern part of the Kern River field near the river. Their well was a hand dug hole 75 feet in depth.

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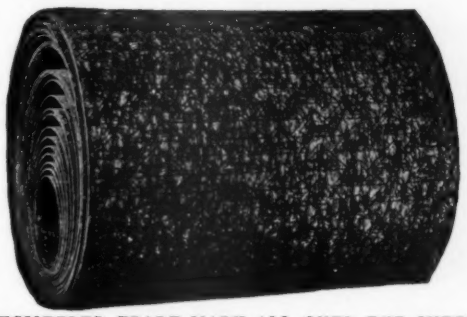

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DURABLA Sheet in all thicknesses is homogenously made of the finest long fibre asbestos and represents 15 years of experience in making a high grade gasket material that has successfully held every condition of service encountered in refineries and pipe lines.

It does not deteriorate in stock or in the flange.

*If you have never used DURABLA Homogeneous Sheet Packing we will accept your orders for any quantity to be paid for on approval.*

Standard sheets come in thicknesses of 1-64", 1-32", 1-16", ⅛", 36" and 48" wide by 144" long; 3-16" and ¼", 36" wide by 72" long. Wider widths can be furnished if desired.

We are prepared to cut gaskets of any special size or shape in any thickness, up to and including ¼", promptly.

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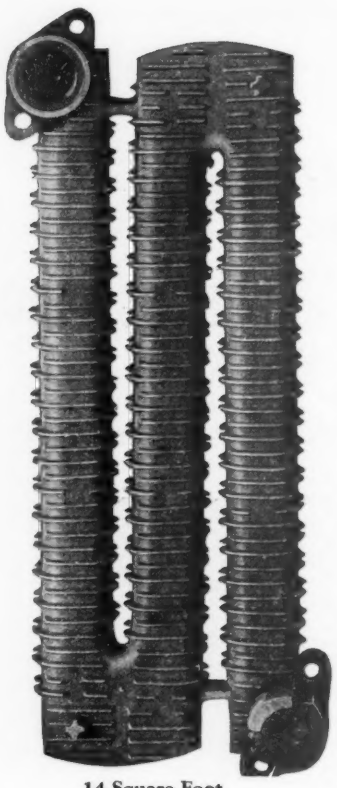

14 Square Foot Section

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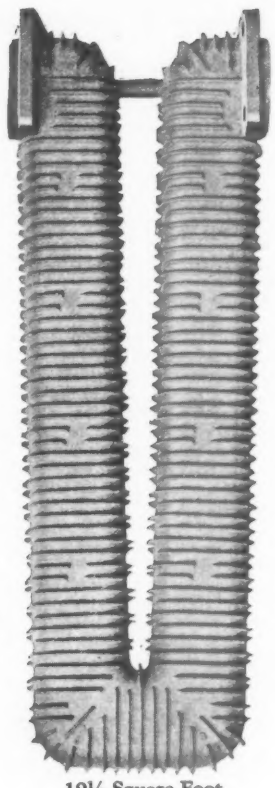
# STERLING OIL SECTIONS

*for immediate shipment*



19½ Square Foot Section

When old-style condensers give out—call for Sterling Oil Sections. Refiners everywhere have proven that Sterling Oil Sections outlast old-fashioned methods.

When you want more surface in the same box—call for Sterling Oil Sections. Sterling Oil Sections occupy much less space than old-fashioned methods.

When you want to save an old box which has a corroded water line—call for Sterling Oil Sections. You will have just as much surface with a lowered water line.

When you want increased efficiency, increased durability, increased accessibility, or when you want durable cast-iron from the water line—call for Sterling Oil Sections.

We shall be glad to send you our illustrated catalog describing these Sections in detail.

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*For manifold use - for continuous use - for cooling*

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*Manufacturers of* IDEAL BOILERS *for* OIL BURNING

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***Sterling Oil Sections are immediately available at our plants in Kansas City, Mo., and Springfield, Ohio***

# RELATIVE FINANCIAL POSITION OF THE LEADING OIL COMPANIES

By N. O. Fanning
*New York Bureau, The Oil and Gas Journal, Room 543, 30 Church St., New York*

NEW YORK, June 14.—Seventy-one oil companies on December 31, 1925, had total assets amounting to $8,001,886,776, according to a compilation made from their annual reports. Of this total the Standard Oil group accounted for $4,565,621,731, or 57 per cent, while the independents accounted for $3,436,265,045, or 43 per cent. This is allowing for the effect of recent mergers and including Pacific Oil, General Petroleum and Pan American Petroleum in the Standard group.

It is impossible to estimate from the compilation the total assets of the oil industry of the United States. The balance sheets are usually very conservative in estimating the value of assets, and often oil properties are not entered at their full production value, a value which is often speculative. If the value of oil in the ground were taken into consideration it would raise the total assets far above the $10,000,000,000 mark, but as this is an asset having only future value, it cannot rightly be taken into account. It is safe to say, however, that the assets of all oil companies in the United States are valued well over $10,000,000,000 without appraising value of oil leases. The 71 companies included in the present compilation may represent about 80 per cent of the entire industry.

Recent mergers have added well over $400,000,000 to the assets of the Standard Oil group.

The capitalization of the 71 oil companies at the beginning of 1926 aggregated $4,154,493,719, this including capital stock, common or preferred stocks. Of this total, independents accounted for $1,774,168,091 and Standards $2,380,325,628.

Total funded debt of all companies was $511,069,792—independents, $328,526,125 and Standards, $182,543,667.

Dividends paid by the 33 independent companies aggregated $86,272,348, while those paid by the Standard Oil companies aggregated $167,950,008. The 21 companies paid a total of $254,950,008 in cash.

### Comparative Table

The following table shows aggregate capitalization, bonded debt, inventories, assets and dividend payments of the 71 companies, as of December 31, 1925, or for the year 1925:

| | Stocks | Bonds | Inventories | Assets | Dividends |
|---|---|---|---|---|---|
| 33 independents | $1,774,168,091 | $328,526,125 | $ 397,582,346 | $3,436,265,045 | $ 86,272,348 |
| 38 Standard | 2,380,325,628 | 182,543,667 | 913,661,173 | 4,565,621,731 | 167,950,008 |
| 71 companies | $4,154,493,719 | $511,069,792 | $1,311,243,519 | $8,001,886,776 | $254,222,346 |
| 33 Independents | 43% | 64% | 30% | 43% | 34% |
| 38 Standard | 57 | 36 | 70 | 57 | 66 |

Ten companies, leading as to total assets, accounted for 57 per cent of the capitalization of the entire 71, 47 per cent of the bonded indebtedness, 63 per cent of the inventories, 59 per cent of the assets and 56 per cent of cash dividend payments.

Detailed figures for the ten leading companies follow:

| | Stocks | Bonds | Inventories | Assets | Dividends |
|---|---|---|---|---|---|
| Standard of N. J. | $714,678,925 | ..... | $294,231,374 | $1,369,170,371 | $34,394,094 |
| Standard of N. Y. | 286,481,600 | 35,000,000 | 148,990,600 | 532,960,861 | 14,345,486 |
| Gulf Oil Corp. | 109,767,900 | 42,904,000 | 66,919,679 | 427,610,293 | 6,554,732 |
| Standard of Ind. | 226,322,708 | ..... | 66,089,705 | 406,059,896 | 22,521,638 |
| The Texas Company | 164,450,000 | ..... | 94,419,602 | 397,638,111 | 19,734,000 |
| Standard of Calif. | 237,910,850 | 20,000,000 | 84,392,320 | 373,722,627 | 18,927,027 |
| Sinclair Consolidated | 222,050,041 | 90,954,499 | 27,635,606 | 351,912,750 | 1,455,474 |
| Shell Union Oil | 218,778,221 | ..... | 22,585,774 | 332,427,906 | 15,031,536 |
| Empire Gas & Fuel | 105,638,599 | 49,109,300 | 8,973,255 | 297,231,480 | 2,451,088 |
| Pure Oil | 98,959,250 | 10,430,000 | 15,730,204 | 218,920,315 | 6,608,920 |
| Total | $2,385,038,094 | $248,397,799 | $529,968,119 | $4,707,654,619 | $142,023,995 |
| P. C. of 71 Companies | 57% | 47% | 63% | 59% | 56% |

The foregoing figures for leading companies do not include former independents now merged with various Standard companies, namely General Petroleum, merged with Standard of New York; Pacific Oil, now part of Standard of California, and Pan American Petroleum & Transport, now with Standard of Indiana. Magnolia Petroleum is taken into account in the figures of Standard Oil Co. of New York.

### Oil Inventories.

Inventories reported by the oil industry comprise the most interesting feature of their reports. In the majority of cases inventory values were greater than ever before in the history of the reporting companies, even exceeding those at the close of 1920, when petroleum prices were the highest ever reached, and considerably above prices at the close of 1925. This indicates the heavy quantities of petroleum, both crude and refined, now carried, due in part to the growth in demand and continued large production.

Of the total inventories valued at $1,311,243,519 of the 71 companies reporting, the Standard group are credited with $913,661,173, or 70 per cent, and independents with $397,582,346, or 30 per cent. The ten companies foremost in total assets hold $829,968,119 worth of crude and refined oil, or 63 per cent of the total held by the entire 71.

However, it is interesting to note that the ten companies leading in assets are not all to be included in the ten foremost as to inventories. These latter are as follows:

| | Inventory |
|---|---|
| Standard of New Jersey | $294,231,374 |
| Standard of New York | 148,990,600 |
| The Texas Company | 94,419,602 |
| Standard of Calif. | 84,392,320 |
| Prairie Oil & Gas | 72,090,554 |
| Gulf Oil | 66,919,679 |
| Standard of Indiana | 66,089,705 |
| Atlantic Refining | 36,995,396 |
| Union Oil of Calif. | 33,527,098 |
| Vacuum Oil | 32,688,322 |
| Total | $930,344,650 |

The ten companies combined hold inventories valued at almost a billion dollars, the actual figure of $930,344,650 representing 71 per cent of the aggregate value of inventories reported by the 71 companies. Of the companies listed above, Prairie Oil & Gas is of special interest, its inventories of $72,090,554 representing, it is believed, largely crude oil; while inventories reported by the others, which are large refining companies, include, of course, considerable refined oil of much greater value per barrel. Inventories reported by Ohio Oil come next to Vacuum, amounting in value at the close of 1925 to $30,493,443. Ohio Oil, like Prairie, is intrinsically a crude purchasing company.

Detailed figures of capitalization, inventories, assets and dividends, as of December 31, 1925, or for the year, for the 71 companies, follow:

## CONDITION OF OIL COMPANIES DECEMBER 31, 1925

### STANDARDS

| Company— | Capitalization: Stocks | Bonds | Inventories | Assets | Dividends |
|---|---|---|---|---|---|
| 1 Anglo-Amer. Oil | 20,000,000 | 8,245,300 | 15,571,370 | 79,912,355 | 3,375,000 |
| 2 Atlantic Ref. | 70,000,000 | 23,931,667 | 36,995,396 | 134,017,270 | 1,400,000 |

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GARLOCK
QUALITY CONTROLLED
PRODUCT

GARLOCK—377

Garlock 377 is a lubricated non-friction metal packing with side walls, back and cushion of frictioned asbestos cloth

The metal core is manufactured from a solid piece of non-friction metal. The Special Garlock Design procures a number of small metal surfaces so staggered as to give a pressure tight bearing on the rod. The cuts in the metal impart extreme flexibility to the packing enabling it to closely encircle the rod.

Small round concealed punchings act as emission holes for the lubricant that is retained in the many folds of the metal.

The asbestos side walls and back hold the metal in place and the folded asbestos core above the metal acts as a pusher and compensating cushion to bring the metal to the rod at an even pressure.

The ratio of wear on the bearing surface of the packing is the same at all times on account of the square construction of the metal core.

Garlock 377 is particularly recommended for service on the piston rods of main engines on steamships, deck engines, hoisting engines, steam shovels and dredges, steam hammers, kickers and steam niggers in the lumber trade and a general all around steam engine packing

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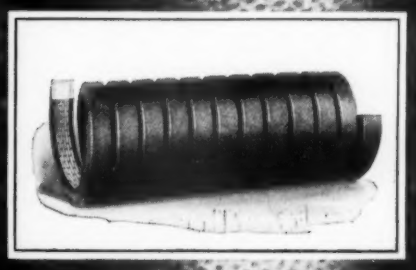
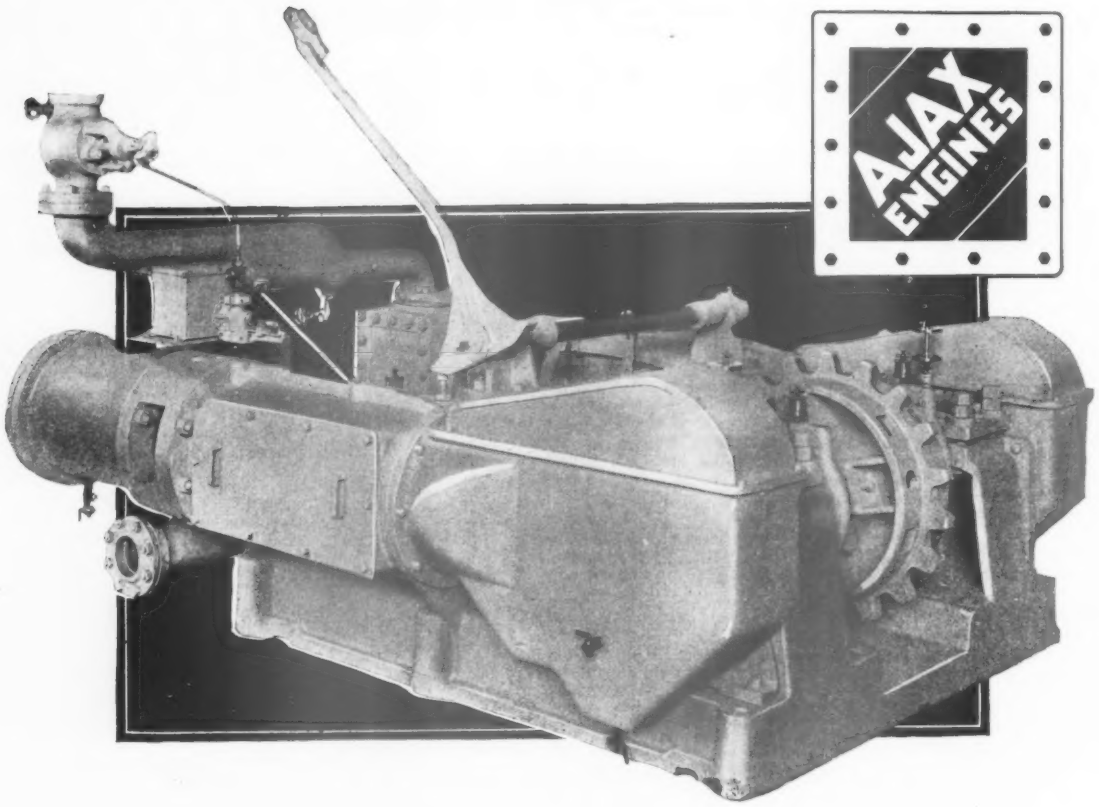


# The Drilling Engine




## The New 12x12 Ideal Ajax Twin *with Enclosed Crankcase*

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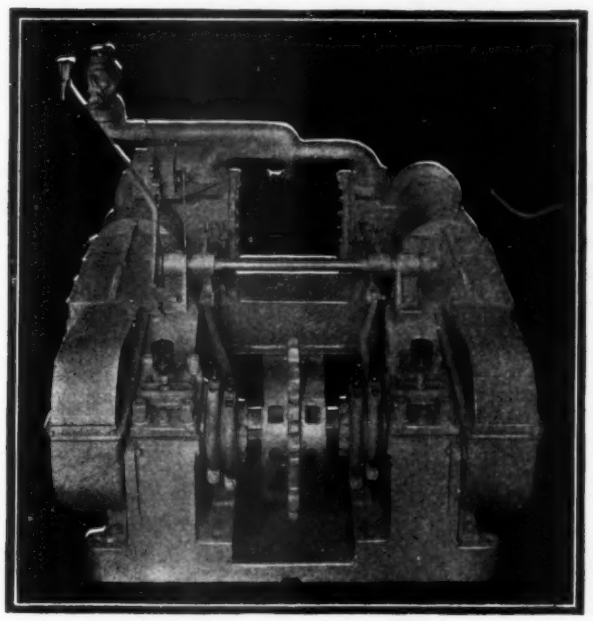
# for Lifelong Service

Good lubrication is the foe of wear. In the Ideal-Ajax 12x12 twin the main bearings, crank pins, and cross heads are lubricated in a bath of oil. There are no oil cups on these parts to require attention. This is the great advantage given by the enclosed crankcase. No dirt or grit can get in or reach the bearing surfaces.

*See this engine at National Supply Co. Branches*



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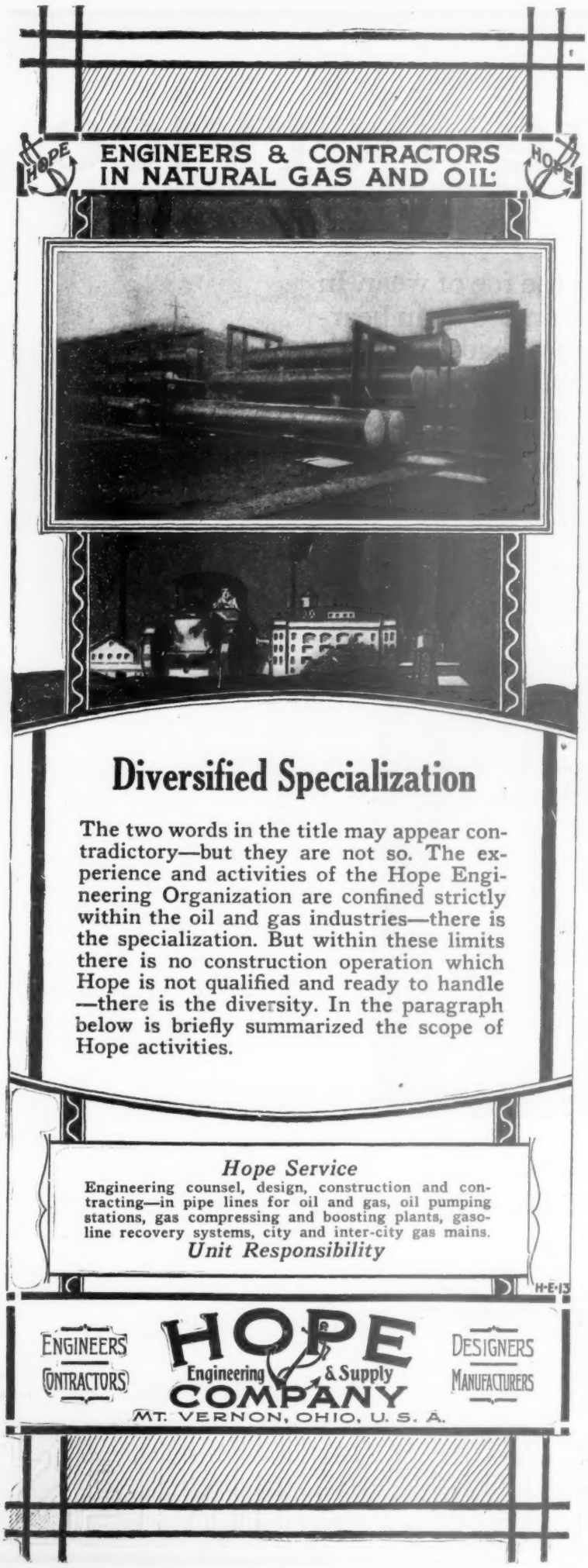


## Diversified Specialization

The two words in the title may appear contradictory—but they are not so. The experience and activities of the Hope Engineering Organization are confined strictly within the oil and gas industries—there is the specialization. But within these limits there is no construction operation which Hope is not qualified and ready to handle—there is the diversity. In the paragraph below is briefly summarized the scope of Hope activities.

*Hope Service*

Engineering counsel, design, construction and contracting—in pipe lines for oil and gas, oil pumping stations, gas compressing and boosting plants, gasoline recovery systems, city and inter-city gas mains.

*Unit Responsibility*

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| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | Borne Scrymser | 1,000,000 | ..... | 471,431 | 1,770,003 | 140,000 |
| 4 | Buckeye P. L. | 10,000,000 | ..... | ..... | 24,210,020 | 800,000 |
| 5 | Chesebrough Mfg. | 4,000,000 | ..... | †2,000,000 | †9,500,000 | 570,000 |
| 6 | Continental Oil | 35,051,920 | 1,205,500 | 8,508,698 | 70,873,559 | 3,505,192 |
| 7 | Cumberland P. L. | 3,000,000 | ..... | ..... | 7,798,225 | 360,000 |
| 8 | Eureka P. L. | 5,000,000 | ..... | ..... | 13,561,460 | 200,000 |
| 9 | Galena-Signal Oil | 22,000,000 | 7,319,700 | 10,183,592 | 42,951,607 | 480,000 |
| 10 | Humble Oil & Ref. | 43,750,000 | 25,000,000 | 47,890,046 | 168,177,818 | 2,100,000 |
| 11 | Illinois P. L. | 20,000,000 | ..... | ..... | 38,664,961 | 2,400,000 |
| 12 | Indiana P. L. | 5,000,000 | ..... | ..... | 10,621,888 | 400,000 |
| 13 | National Transit | 6,362,500 | ..... | ..... | †18,000,000 | 636,250 |
| 14 | New York Transit | 5,000,000 | ..... | ..... | 9,531,921 | 150,000 |
| 15 | Northern P. L. | 4,000,000 | ..... | ..... | 6,396,343 | 240,000 |
| 16 | Ohio Oil | 60,000,000 | ..... | 30,493,443 | 99,878,010 | 3,600,000 |
| 17 | Prairie Oil & Gas | 60,000,000 | ..... | 72,090,554 | 154,424,096 | 4,800,000 |
| 18 | Prairie P. L. | 81,000,000 | ..... | ..... | 136,861,836 | 6,480,000 |
| 19 | Solar Refining | 4,000,000 | ..... | 1,228,289 | 8,263,399 | 400,000 |
| 20 | Southern P. L. | 10,000,000 | ..... | ..... | 13,666,475 | 400,000 |
| 21 | South Penn Oil | 20,000,000 | ..... | 12,754,096 | 48,136,141 | 300,000 |
| 22 | Southwest Pa. P. L. | 3,500,000 | ..... | ..... | 6,186,518 | 140,000 |
| 23 | Standard of Calif. | 237,910,850 | 20,000,000 | 84,392,320 | 373,722,627 | 18,927,027 |
| 24 | Standard of Indiana | 226,322,706 | ..... | 66,089,705 | 406,059,896 | 22,521,638 |
| 25 | Standard of Kansas | 8,000,000 | ..... | 1,881,799 | 11,466,389 | ..... |
| 26 | Standard of Kentucky | 16,929,809 | ..... | 8,108,653 | 44,518,443 | 677,192 |
| 27 | Standard of Nebraska | 3,012,400 | ..... | 999,747 | 6,944,309 | 602,480 |
| 28 | Standard of N. J. | 714,678,925 | ..... | 294,231,374 | 1,369,170,371 | 34,394,094 |
| 29 | Standard of N. Y. | 286,481,600 | 35,000,000 | 148,990,600 | 532,960,861 | 14,345,486 |
| 30 | Standard of Ohio | 21,000,000 | ..... | 7,236,809 | 53,446,590 | 2,100,000 |
| 31 | Swan & Finch Oil | †1,011,966 | ..... | †350,000 | 1,627,153 | ..... |
| 32 | Union Tank Car | 36,564,400 | ..... | ..... | 46,536,844 | 1,750,370 |
| 33 | Vacuum Oil | 62,199,950 | 14,900,000 | 32,688,322 | 144,492,416 | 12,424,615 |
| 34 | General Petroleum | 31,748,250 | 27,287,000 | 12,319,843 | 106,563,904 | 2,103,620 |
| 35 | Pacific Oil | 52,500,000 | ..... | 792,901 | 95,385,781 | 8,750,000 |
| 36 | Pan American P. & T. | 137,816,050 | 16,783,000 | 12,903,340 | 189,119,435 | 16,477,044 |
| 37 | Producers & Refiners | 40,284,300 | 2,871,500 | 3,182,808 | 59,717,349 | ..... |
| 38 | Lago Petroleum | 11,200,000 | ..... | 1,306,037 | 20,495,258 | ..... |
| | Total | 2,380,325,628 | 182,543,667 | 913,661,173 | 4,565,621,731 | 167,950,068 |

†Latest figures available; partly estimated.

**INDEPENDENTS**

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | American Republics | *30,200,000 | 9,593,000 | 3,513,200 | 61,095,545 | 700,000 |
| 2 | Associated Oil | 56,000,000 | 25,645,250 | 19,710,356 | 124,857,466 | 4,200,000 |
| 3 | Barnsdall Corp. | 23,204,200 | 3,925,500 | 1,591,484 | 40,393,238 | ..... |
| 4 | California Petroleum | 44,965,125 | 7,151,300 | 5,472,121 | 75,836,711 | 2,419,168 |
| 5 | Houston Oil | 33,916,200 | 7,000,000 | 516,635 | 46,865,490 | 715,808 |
| 6 | Independent Oil & Gas | *5,784,861 | ..... | 128,396 | 13,062,632 | 474,750 |
| 7 | Indian Ref. | 10,147,080 | 2,012,000 | 2,919,375 | 20,654,340 | ..... |
| 8 | Maracaibo Oil Explor. | *4,119,492 | ..... | ..... | 4,120,100 | ..... |
| 9 | Marland Oil | *88,897,186 | ..... | 8,544,472 | 92,802,428 | 4,579,874 |
| 10 | Mexican Seaboard Oil | *6,510,038 | 3,500,000 | 65,414 | 18,756,194 | ..... |
| 11 | Mid-Continent Pet. | *47,453,970 | 11,762,000 | 8,652,651 | 77,767,520 | ..... |
| 12 | Pan Amer. Western | *11,750,235 | 11,250,000 | 15,015,144 | 57,228,294 | ..... |
| 13 | Panhandle Prod. & Ref. | *5,548,928 | ..... | 638,042 | 7,172,438 | ..... |
| 14 | Phillips Petroleum | *91,177,860 | ..... | 10,291,275 | 129,832,753 | 4,630,207 |
| 15 | Pierce Oil Corp. | 44,622,831 | ..... | ..... | 44,622,831 | ..... |
| 16 | Pierce Pet. Corp. | *19,134,519 | 1,291,000 | 6,797,760 | 26,523,179 | ..... |
| 17 | Pure Oil | 98,959,250 | 10,430,000 | 15,730,204 | 218,920,315 | 6,608,920 |
| 18 | Shell Union Oil Corp. | *218,778,221 | ..... | 22,585,774 | 332,427,906 | 15,031,536 |
| 19 | Simms Petroleum | 6,844,920 | ..... | 1,956,707 | 16,786,110 | 684,775 |
| 20 | Sinclair Consolidated | *222,050,041 | 90,954,499 | 27,635,606 | 251,912,759 | 1,455,474 |
| 21 | Skelly Oil | 23,083,990 | 7,912,576 | 3,582,102 | 63,438,877 | 434,336 |
| 22 | Sun Oil | *40,470,237 | 10,236,000 | 9,216,617 | 54,869,949 | 836,996 |
| 23 | Superior Oil | *8,208,215 | 690,200 | 527,782 | 6,107,559 | ..... |
| 24 | The Texas Company | 164,450,000 | ..... | 94,419,602 | 397,638,111 | 19,734,000 |
| 25 | Texas Pacific C. & O. | 8,448,048 | ..... | 1,645,742 | 35,155,037 | ..... |
| 26 | Tide Water Oil | 75,503,687 | ..... | 15,111,779 | 111,469,062 | 2,317,577 |
| 27 | Transcontinental Oil | *40,648,094 | 5,909,000 | 2,941,711 | 52,098,019 | ..... |
| 28 | Union Oil Co. of Calif. | 94,506,225 | 24,100,500 | 33,527,098 | 159,413,365 | 7,560,498 |
| 29 | White Eagle O. & R. | *14,085,208 | 2,400,000 | 2,817,183 | 26,766,561 | 965,000 |
| 30 | Gulf Oil Corp. | 109,767,900 | 42,904,000 | 66,919,679 | 427,610,293 | 6,554,732 |
| 31 | Lion Oil Refining | *5,234,333 | 750,000 | 1,221,153 | 9,095,467 | 400,000 |
| 32 | Salt Creek Producers | 14,968,598 | ..... | 4,994,027 | 33,734,416 | 3,517,599 |
| 33 | Empire Gas & Fuel | †105,638,599 | 49,109,300 | 8,973,255 | 297,231,480 | 2,451,088 |
| | Total | 1,774,168,092 | 328,526,125 | 397,582,346 | 3,436,265,045 | 86,272,348 |

*Represents in part stock of no par value.
†Latest available figures.

# RECEIPTS OF CALIFORNIA OILS AND IMPORTS OF PETROLEUM

Receipts of California crude and refined oils at Atlantic and Gulf Coast ports for the month of May totaled 2,653,000 bbls., a daily average of 85,580 bbls., compared with 2,804,000 bbls., a daily average of 93,467 bbls., for the month of April.

Receipts at Atlantic and Gulf Coast ports for the week ended June 5 totaled 751,000 bbls., a daily average of 107,286 bbls., against 723,000 bbls., a daily average of 103,286 bbls., for the week ended May 29.

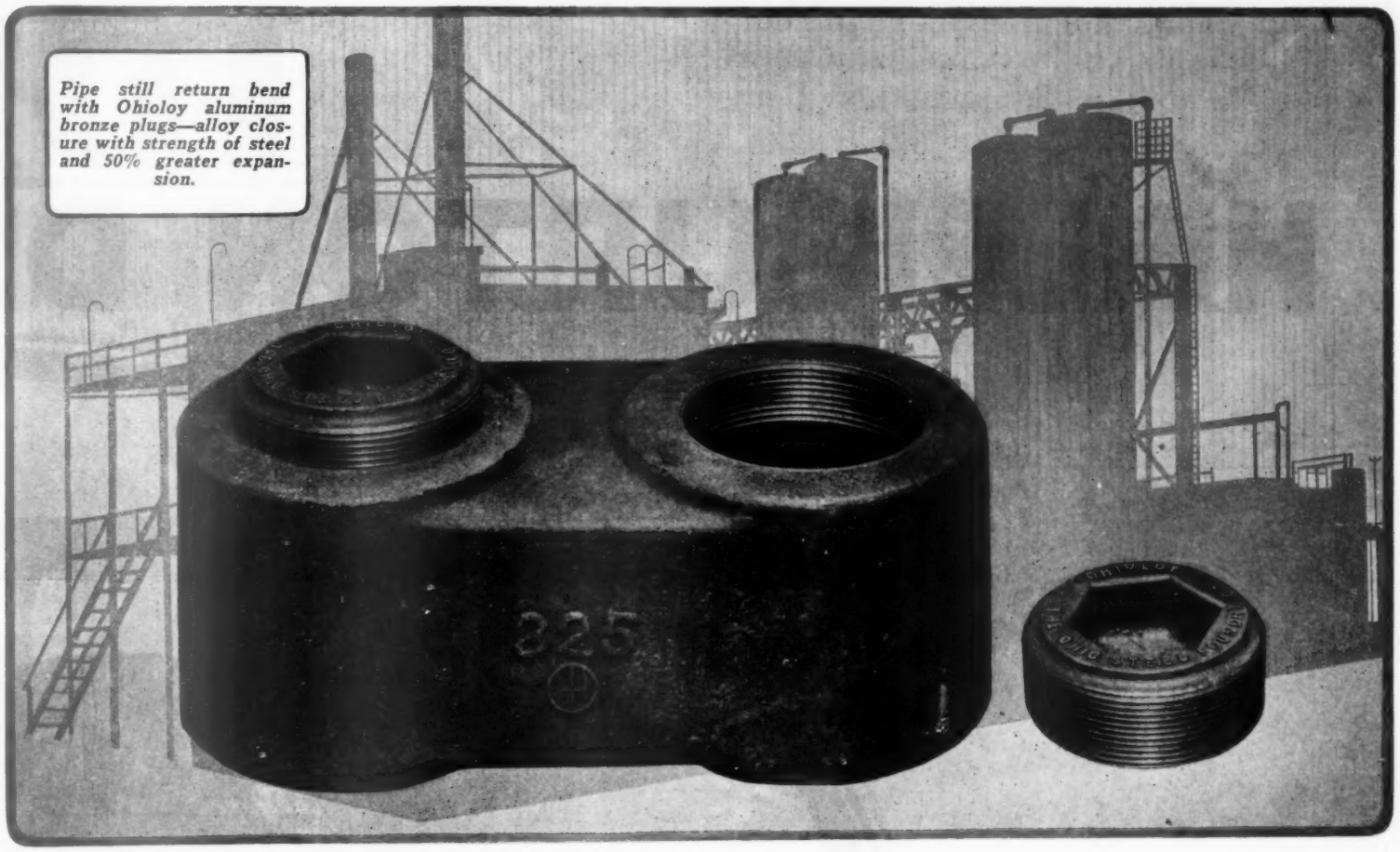
| | | | Week Ended | |
|---|---|---|---|---|
| At Atlantic Coast Ports— | Total May | Total April | June 5 | May 29 |
| Baltimore | 839,000 | 571,000 | 362,000 | 78,000 |
| Boston | 245,000 | 154,000 | 78,000 | 79,000 |
| New York | 477,000 | 850,000 | ..... | 175,000 |
| Philadelphia | 417,000 | 402,000 | 235,000 | 76,000 |
| Others | 550,000 | 686,000 | 76,000 | 250,000 |
| Total | 2,528,000 | 2,663,000 | 751,000 | 658,000 |
| Daily average | 81,548 | 88,767 | 107,286 | 94,000 |
| At Gulf Coast Ports— | | | | |
| Port Arthur and Sabine district | 125,000 | 141,000 | ..... | 65,000 |
| Daily average | 4,032 | 4,700 | ..... | 9,286 |
| Total Atlantic and Gulf Coast ports | 2,653,000 | 2,804,000 | 751,000 | 723,000 |
| Daily average | 85,580 | 93,467 | 107,286 | 103,286 |

According to figures collected by the American Petroleum Institute, imports of crude and refined oils at the principal ports for the month of May totaled 6,166,000 bbls., a daily average of 198,903 bbls., compared with 6,196,000 bbls., a daily average of 206,533 bbls., for the month of April.

Imports at the principal United States ports for the week ended June 5 totaled 1,783,000 bbls., a daily average of 254,714 bbls., compared with 1,565,000 bbls., a daily average of 223,572 bbls., for the week ended May 29.

| | | | Week Ended | |
|---|---|---|---|---|
| At Atlantic Coast Ports— | Total May | Total April | June 5 | May 29 |
| Baltimore | 384,000 | 456,000 | 130,000 | 105,000 |
| Boston | 380,000 | 420,000 | 130,000 | 65,000 |
| New York | 2,341,000 | 2,305,000 | 750,000 | 603,000 |
| Philadelphia | 361,000 | 319,000 | 49,000 | 118,000 |
| Others | 668,000 | 1,180,000 | 203,000 | *175,000 |
| Total | 4,134,000 | 4,680,000 | 1,262,000 | 1,066,000 |
| Daily average | 133,355 | 156,000 | 180,286 | 152,286 |
| At Gulf Coast Ports— | | | | |
| Galveston district | 394,000 | 576,000 | 146,000 | 137,000 |
| New Orleans and Baton Rouge | 1,402,000 | 747,000 | 330,000 | 309,000 |
| Port Arthur and Sabine district | 60,000 | 60,000 | ..... | ..... |
| Tampa | 176,000 | 133,000 | 45,000 | 53,000 |
| Total | 2,032,000 | 1,516,000 | 521,000 | 499,000 |
| Daily average | 65,543 | 50,533 | 74,428 | 71,286 |
| At all United States Ports— | | | | |
| Total | 6,166,000 | 6,196,000 | 1,783,000 | 1,565,000 |
| Daily average | 198,903 | 206,533 | 254,714 | 223,572 |

*Revised.


Pipe still return bend with Ohioloy aluminum bronze plugs—alloy closure with strength of steel and 50% greater expansion.
225

# Hi-Steel Return Bends

## Standard Equipment for Pipe Stills

Hi-Steel Return Bends are made of the finest electric steel annealed, machined, and tested at our Springfield works.

Special equipment and concentrated effort in every detail of their manufacture have made them in demand wherever high temperatures and pressures are used.

They are designed for hot oil working pressures up to 900 lbs. and 900° F.

They are made in any size, shape or quantity for any operating conditions and are backed by the reputation of The Ohio Steel Foundry Company.

See that this Trade Mark is in the Vital Spot of your Pressure Units

*We have patterns for all diameters of tubing and on practically any center required. Eliminate pattern costs by consulting us.*

*Tell us pressure and temperature, center to center dimension, O. D. of tube and we will suggest design and quote prices.*

# The Ohio Steel Foundry Co.

## Springfield, Ohio

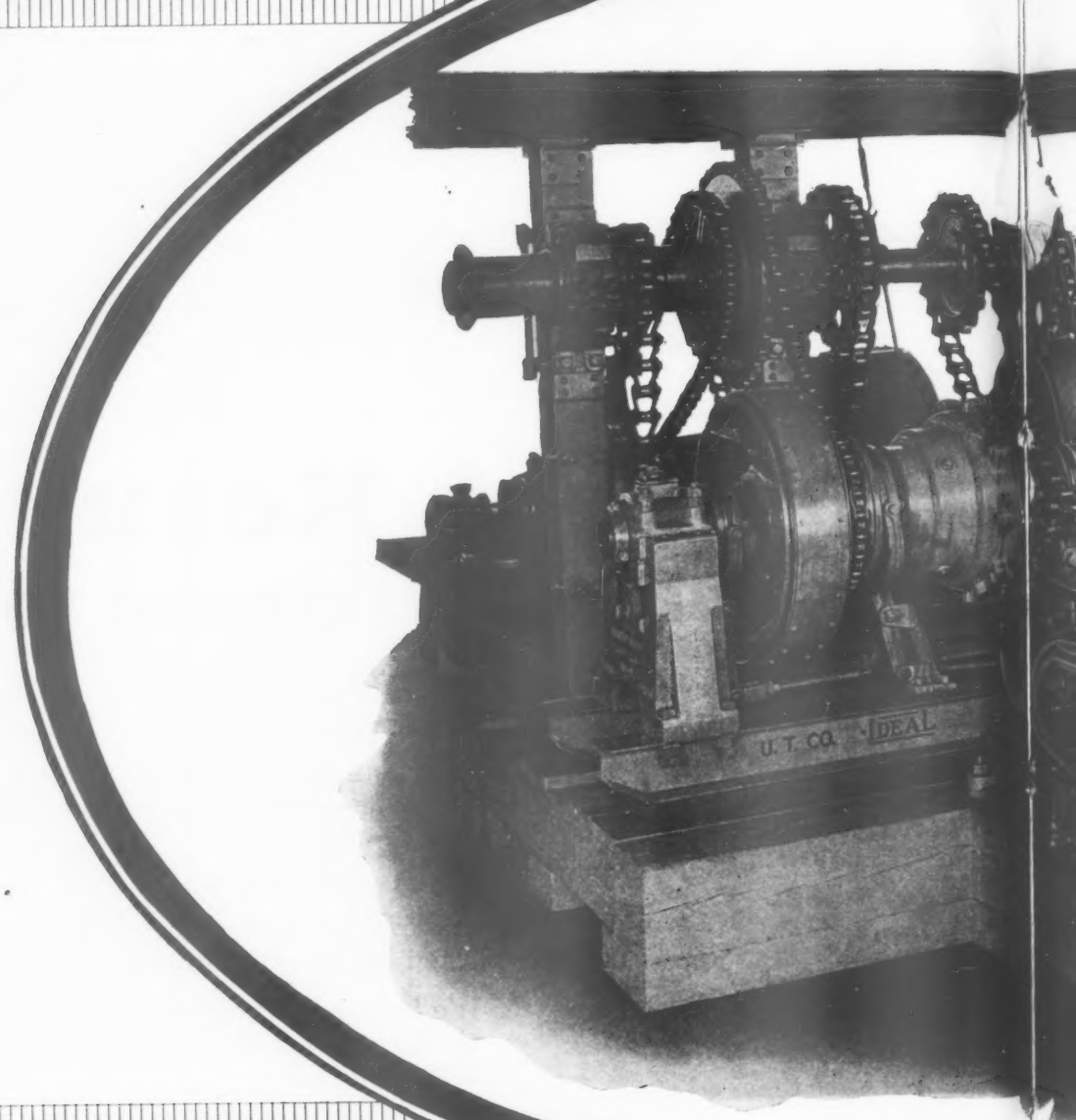
*Pioneers in Return Bends for Pipe Stills*

SALES OFFICES:

Houston—Harrisburg Pipe & Pipe Bending Co., of Texas
Chicago—Peoples Gas Bldg.
New York—75 West St.
Philadelphia—22 So. 15th St.
Los Angeles—4920 Loma Vista Ave.

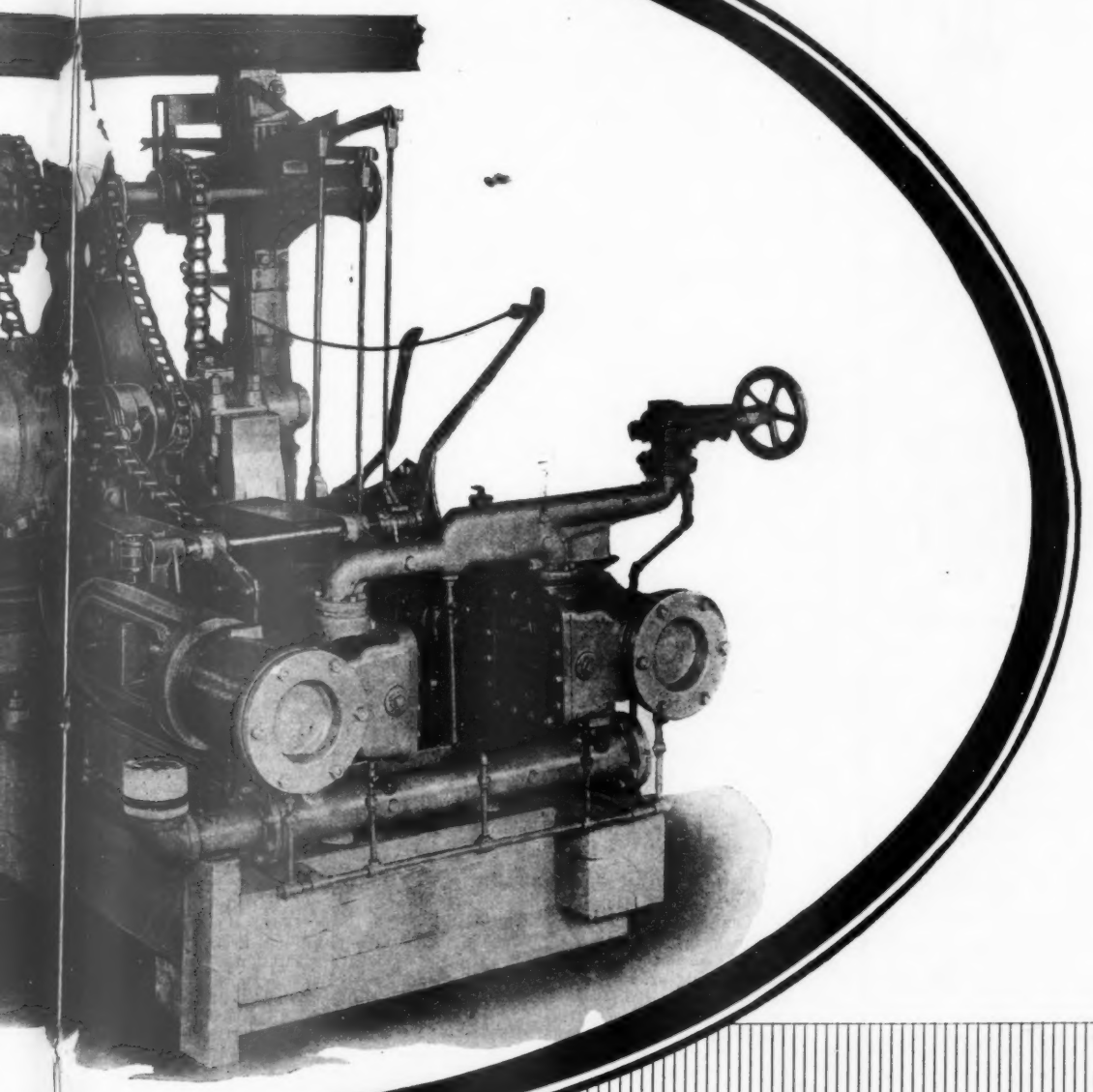
PLANTS IN
Springfield
Lima

IDEA
HALLIBURTON DRI




THE NATIONAL SU

# HAL
# RILLING CONTROL



# SUPPLY COMPANIES

# Lightning Well Tools and Pumping Specialties

*Wire Line Beam Hanger*

Full adjustment of Mule Head.
Quick, detachable rope end.
All steel quick release grip.
Swivel self oiling steel yoke casting on beam.
This hanger may be used with or without the straight lift rope guides and is so priced.
Will handle a stroke 7 feet long.
Weight, 290 lbs.

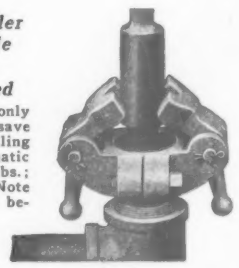
**Sucker Rod Rotator**

Designed for use with Lightning Hanger, but works with almost any make of hanger, constructed almost entirely of steel—rotates on heavy duty ball bearing. Friction disk eliminates danger of twisted rods. 100 teeth on ratchet so that a very small degree of turn may be made or as much as 1-16 of turn as desired. Perfect, simple and dependable.

*Weight, 180 pounds*

*Sucker Rod Spider and Bell Nipple Combined*
*Open and Closed*

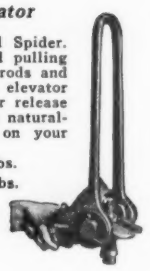
With this you need only one elevator and save 50% of your pulling time. Action automatic and sure. 2-in., 10 lbs.; 2½-in., 15 lbs. Note high speed elevator below.



*High Speed Elevator*

For use with Sucker Rod Spider. The most satisfactory rod pulling outfit made. Avoids bent rods and lost time. Rods cradle in elevator body and will not kink or releaae accidentally. Snaps on as naturally as placing your hat on your head.

Light pattern, 12 lbs.
Heavy pattern, 15 lbs.



*Stuffing Box*

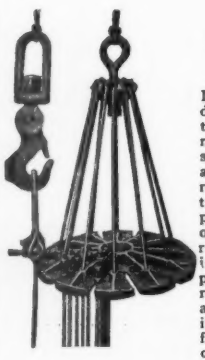
The lightning T. S. Lubricator Stuffing Box satisfies under the most adverse conditions.

**Manufacturers of**

Pumping Powers,
Geared and Band Wheel
Stuffing Boxes
Steel Grips
V-Swings, Jacks
Polished Rod Rotators
Casingheads
Casing and Tubing Hooks
Polish Rod Clamps

*Stocks for Delivery at These Points:*

Wichita Falls, Texas
GROVER C. JOHNSON
Tulsa, Oklahoma
B. V. EMERY & CO.
Casper, Wyoming
GENERAL ENGINEERING CO.
Bradford, Pennsylvania
COMBINATION ENG. & COM. CO.
ALL REPUBLIC SUPPLY STORES
Houston, Texas
HARRY B. SHINE
ALL INTERNATIONAL SUPPLY COMPANY STORES
Putnam, Texas
PUTNAM SUPPLY COMPANY.



*Rod Rack Turns on Ball Bearings*

Rods may be placed directly from elevator to rack, saving much time. Holds 66 strands in perfect alignment and being round may be easily turned to any desired position. All danger of bent or kinked rods eliminated as it is only necessary to pull and hang the rods. A time saver, and should be placed in all derricks where frequent pulling occurs.

*Write for showing of full line.*

**Kansas City Hay Press Co., Kansas City, Missouri**

## NEW QUESTIONNAIRE ON BURNING OILS

(Continued from Page 78)

no standard for oil used in domestic heating.

The last inquiry included in the questionnaire seeks to obtain information from the refiners, jobbers and marketers, respecting the number of fuel oil burners in the particular territory of each. It is believed this questionnaire offers an opportunity to obtain this information as the Bureau of Census is not planning any inquiry that might be considered a duplication of this feature of the work. It is believed all this information will be welcome not only to refiners and distributors of petroleum products but also to the manufacturers of oil burners.

Following is a copy of the letter and the list of 10 questions prepared to be sent to refiners, jobbers and marketers by the Bureau of Mines as a means of obtaining information concerning oil burners and the fuel oil being used for domestic heating:

**Purpose of Survey**

"Gentlemen:

"During the recent hearings before the Federal Oil Conservation Board, it was brought out that there is no accurate detailed information available as to the quantities of fuel oil that are used for different purposes. An executive of one of the larger oil companies in discussing the price of gasoline and its relation to the price the refiners could afford to pay for fuel oil for cracking, stated that 'one of the difficulties that we are under today is that there is no really correct statistical information as to the exact consumption of fuel oil and the purposes for which it is consumed.'

"Many letters received by the Bureau of Mines from the oil industry have stressed the need of economic surveys covering the consumption of petroleum products. The bureau now proposes to make some of these surveys, as it is believed that this information is desired both by the petroleum industry and by the consumers. The first study to be made covers the consumption of fuel oil, including that used for domestic heating purposes, in which the bureau wishes to find out just what portion of the fuel oil manufactured is used for the heating of homes.

"The information obtained by this study will be analyzed, compiled and published so that it will be readily available to the petroleum industry and to the general public. All material furnished will be treated as strictly confidential and will not be published in a form that will disclose the operations of any individual company.

"Since the success of this endeavor to furnish the refiners and consumers of petroleum with this information depends on your co-operation, it is hoped that your company will do its part towards supplying the data indicated on the inclosed form.

"H. H. HILL,
"Chief Petroleum Engineer."

**Copy of Questionnaire**

Questionnaire to refiners and marketers of fuel oil for domestic heating:

1. What grade or grades of fuel oil are generally marketed in your territory for domestic heating purposes?
   a. Trade designation (kerosene distillate, furnace oil, stove oil, distillate, gas oil, fuel oil, refinery residuum, etc.)
   b. Specifications such as gravity A.P.I., flashpoint, burning point, viscosity, cold test or pour test, distillation range for lighter grades, B.t.u. per gallon pound, etc.
2. Which grade or grades of fuel oil does your company sell of those available in your marketing territory?
3. What quantity of oil for domestic heating did your company and subsidiaries market direct to consumers in 1923, 1924 and 1925? What quantity was marketed to jobbers during these years? Please furnish below the names and addresses of the three largest jobbers to whom you sell and quantities sold to each during the year 1925.
4. In what territory do you market direct to consumers? What are your main distributing centers for fuel oil?
5. What influence does the price for cracking stock have on quotations for oil used for domestic heating?
6. In what ways does your company co-operate with burner manufacturers and distributors towards increasing the use, availability and uniformity of grade of fuel oil for domestic heating?
7. Do you favor a standard grade of oil for domestic heating? What specifications should apply to such an oil?
8. Is the trend in demand in your marketing area towards lighter or towards heavier oils for domestic heating? Is there a trend towards a uniform grade or grades?
9. What has been the price trend in your territory for similar grades of domestic heating oils over 1923, 1924, 1925 and first four months of 1926? Average quotations by months are desired if available.
10. What is your estimate of the number of oil burners in your marketing territory used for domestic heating? Please give this by cities if possible

## ARTESIA, NEW MEXICO

(Continued from Page 56)

No. 47, Section 28-18-28, swabbing; No. 48, Section 21-18-28, drilling below 700 feet; H. F. Hall and others' No. 1, Section 27-17 31, location; Hasenfuss-Donley No. 2, NW cor. NE NE, Section 13-18-27, drilling; Harris & Rehn's No. 1 Winans, NW NE, Section 15-18-26, cementing casing at 752 feet; Hamilton Petroleum Co.'s No. 1 Billings, Section 12-19-26, drilling; Ohio Oil Co.'s No. 2 New States, SW SE, Section 8-18-28, rigging up; No. 9 New States, SE SW SE, Section 4 18-28, on production; Picher Oil & Gas Corp.'s No. 3, SE Section 12-18-27, drilling below 1,500 feet; Swartz, Compton & Eaton's No. 1 Brainard permit, NE cor. SW, Section 5-18-27, shut down temporarily at 1,595 feet; Sun Oil Co.'s No. 1, Section 21-25 30, rigging up; Twin Lakes Oil Co.'s No. 8, NW SW, Section 28-18-28, fishing at 2,530 feet; Texas Production Co.'s No. 5, NW NE NE, Section 8-18-28, drilling in below 2,100 feet; The Texas Company's No. 5 George Bobb permit, center Section 17-17-28, drilling below 2,130 feet in a hard gray lime; Wade & Bujac's No. 1 Goodale, NW NW, Section 19-18-29, drilling with oil showing at 1,965 feet; Wooley & Jones' No. 1 Beeson, SE cor. Section 33-17-30, drilling below 2,300 feet.

**Chaves County**

Colorado Gas & Fuel Co.'s No. 1, NW SW, Section 16 8-27, fishing below 5,000 feet; D. C. Devito and others' No. 1, SW Section 24-11-26, drilling; Neal and others' No. 1, Section 25-9-25, abandoned at 1,495 feet; The Texas Company's No. 1 Dunken dome, SW. Section 29-17-18, drilling below 400 feet.

**Lea County**

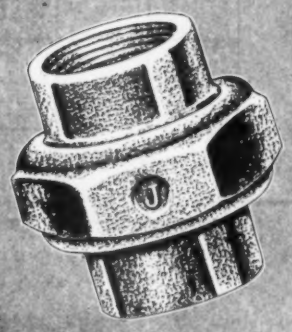
J. S. Covert's No. 1, Section 15-21 33, underreaming at 600 feet; Inglefield and others' No. 1, Section 4-17-34, drilling below 250 feet; Lloyd Simons' No. 1 Simons permit, SW cor. Section 29-17-32, drilling 200 feet; Maljamar Oil & Gas Corp.'s No. 1 Baish permit, NE Section 21-17-32, drilling below 4,012 feet; Maljamar Oil Co.'s No. 1 Grace Mitchell permit, SW cor. Section 5-17-32, standard rig completed; Maljamar Oil Co.'s No. 1 Beardsley permit, NE cor. Section 15-17-32, drilling below 400 feet; Maljamar Oil Co.'s No. 1 Pearsall permit, NE cor. Section 33 17-32, awaiting tools; Maljamar Oil & Gas Corp.'s No. 1 McDonald & Jewitt permit, SE NW, Section 13-18-32, moving rig; Maljamar Oil Co.'s No. 1 Harry Walker permit, SW cor. NW, Section 5-18 32, drilling below 100 feet; Maljamar Oil Co.'s No. 1 Stroup permit, SE cor. SE, Section 1-18-32, drilling below 100 feet; Maljamar Oil Co.'s No. 1 William Mitchell permit, SW cor. Section 17-17-32, validated hole; Maljamar Oil Co.'s No. 1 Pearl Miller permit, NW Section 23-17-32, validated hole; Skelly Oil Co.'s No. 1, NE cor. Section 22 17-31, moving rig to location; Ross No. 1, Section 27-10-32, no report.

. . . Cupola-melted malleable absorbs impurities from the coke; air-furnace malleable does not.

*Jarecki Malleable Fittings are made of air-furnace malleable.*

Your nearest Jarecki store is waiting to serve you.

Jarecki Cast-Iron Fittings are close-grained and true—carefully made and religiously inspected.



Jarecki

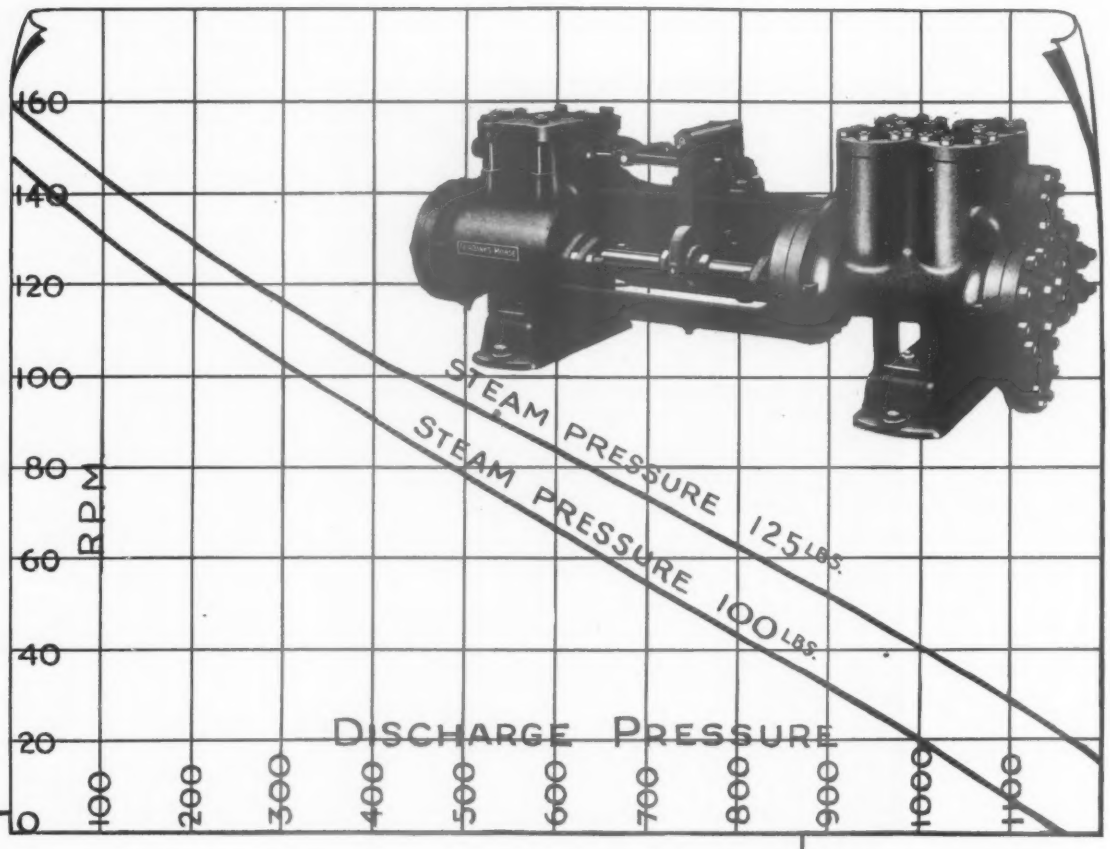
MANUFACTURING COMPANY

Home Office and Factory—Erie, Pa., U. S. A.

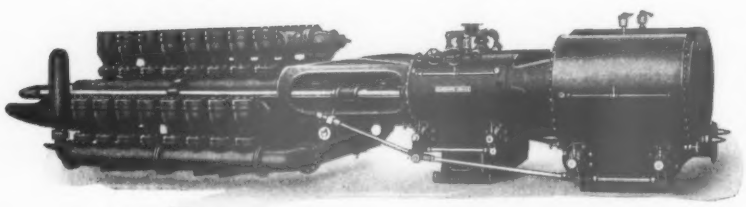
General Office—St. Louis, Mo.

*Branch stores at all important places in the Oil Country.*

*District Offices* { Pittsburgh, Pa.; El Dorado, Kan.; Tulsa, Okla.; Newark, Ohio; Eastland and Dallas, Texas; Lawrenceville, Ill.; Parkersburg, W.Va.

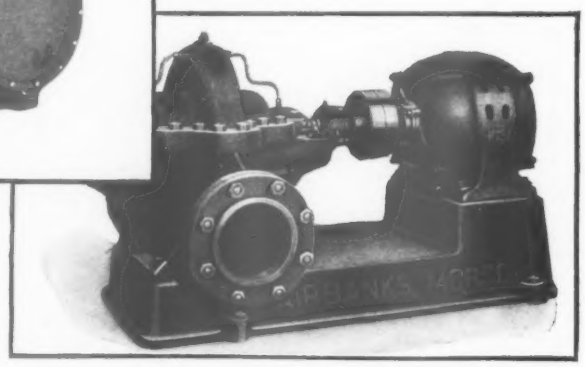



*Test curve showing relation between strokes per minute and discharge pressure of the F-M 10x3x10 oil-field-line pump which is illustrated.*



*Fairbanks-Morse builds pumps of practically all capacities up to main line station requirements. Here is a 36" stroke compound, duplex valve-pot pumping engine—daily capacity 25,000 barrels.*

*For loading primary pumping, etc., this self-oiling pump has proved ideal. Every moving part—even the silent chain—is totally enclosed and runs in oil. The pump is furnished either with F-M ball-bearing motor, with F-M gas engine, or for belt drive.*



*Ball-bearing centrifugal pump—Ball-bearing motor, 3600 R.P.M. —unit-built.*

# Here *is* performance

THIS actual test of a Fairbanks-Morse 10x3x10 oil-field-line pump tells its own story of the adaptability of this unit to field service. When operating at 40 strokes a minute against 800 pounds pressure it is necessary to increase steam pressure only 25 pounds to step the discharge pressure up to 1000 pounds. Ample cushioning effect is provided in the design of the steam end so that in the event of a suddenly "broken" suction line or interrupted suction supply, the mechanism is not racked or damaged by racing. Note that under these conditions the pump operated up to 160 r.p.m., or four times normal speed, with perfect cushioning.

Down to the finest detail, this pump is designed and built to meet high-pressure requirements with maximum efficiency and lowest maintenance cost. The design of the fluid end eliminates the possibility of gas-pocket formation, thus insuring a completely filled cylinder every stroke. These pumps are also built in sizes of 10x3½x10 and 10x4x10, with interchangeable, removable liners which can be readily changed or renewed in the field.

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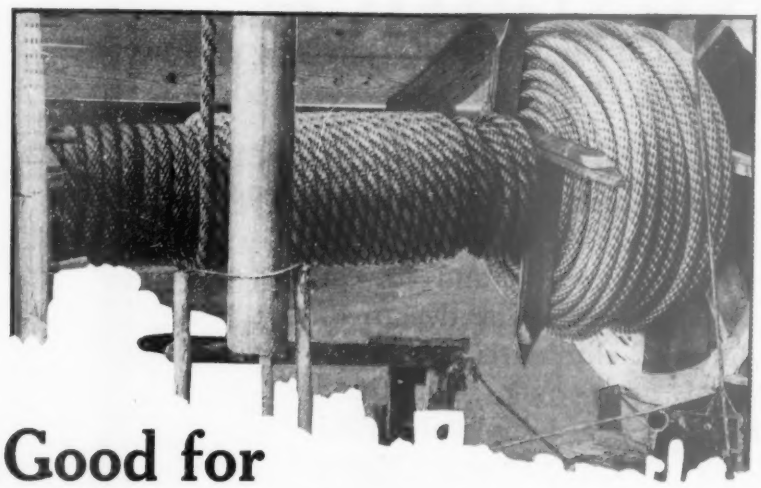

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# OFFER OF OSAGE TRIBAL COUNCIL FOR NAVAL OIL RESERVE DISCUSSED

By H. J. Hagerman
*U. S. Commissioner to the Navajo Tribe*

SANTA FE, N. Mex., June 12.—The Secretary of the Interior has ordered a second Navajo lease sale to be held in Santa Fe on June 23, 1926.

The first lease sale on Navajo Treaty lands was held in Santa Fe on October 15, 1923. Oil was first discovered in the Navajo Treaty reservation on the Hogback dome by the Midwest Refining Co. in 1923. Their lease on that structure is actually producing about 516 bbls. a day from the Dakota sands. This Dakota Pool has been defined in this lease except to the north. As defined it would probably be capable of a continuous economic production from the present proven area of about 1,800 to 2,000 bbls. a day for several years. The company is not producing more because of the marketing difficulties and because it found it to its advantage to blend this very high grade oil with oils of a lower grade at its refineries in Utah and Colorado, and do not need to use more of it. The Hogback wells are from 640 to 785 feet deep. The oil is about 62½ per cent gravity with from 70 to 73 per cent gasoline and naphtha content.

At the 1923 sale a number of tracts adjacent to the Midwest leases on the Hogback were offered, but so far no oil in paying quantities in the shallow sands has been developed on any of these contiguous tracts. There will, however, be offered at the coming sale, four sections and tracts north of the present Midwest lease where there is now reason to believe that there is a separate closure. These are Tracts 5, 8, 19 and 20, being Section 36-30-17; Section 6-29-16; Section 31-30-16; and Section 1-29-17.

At the 1923 sale, leases on four exploratory tracts were sold, namely:

| | Acres |
|---|---|
| Tract A—Tocito | 4,000 |
| Tract B—Table Mesa | 3,200 |
| Tract C—Rattlesnake | 4,080 |
| Tract D—Beautiful Mt. | 4,800 |

### Commercial Oil

On the Rattlesnake and Table Mesa leases, oil in paying quantities has been developed. Only the northern part of the Rattlesnake lease has been so far developed. There are now 10 producing wells in that part of the property with a total potential production of between 5,000 and 6,000 bbls. per day. It is not possible to say just what is the maximum economic capacity of these wells so far drilled, or of the total developed area of the lease, because, on account of the lack of marketing facilities and for other obvious reasons, there has been no way of making a thorough test. About 500 bbls. a day are actually being produced and transported in a pipeline by way of the Hogback lease to Farmington, where there is a small refinery of limited capacity.

### Wells 900 Feet Deep

The wells in the Dakota are from 750 to 900 feet deep. In some of the wells three different producing sands have been developed, totaling in thickness as much as 215 feet. Some of the first wells sunk in this area in which drilling was stopped in the first sand, are now being deepened and showing greatly increased production. It is quite impossible to estimate at this time what is the capacity or extent of the Dakota Pool in the northern end of this leasehold. The edges of the pool, west and northwest, have not yet been determined. The south end of the structure has not yet been tested at all. There seems to be a syncline between the north and south ends, although this is by no means definitely determined as yet.

### Building Pipeline

The Continental Oil Co. is now building a 4-inch pipeline 94 miles in length to Gallup, in order to market Rattlesnake and Table Mesa oils. This will have a capacity of 5,000 bbls. a day and will be in operation in June. The oil will be shipped by railroad east from Gallup to refineries on the Gulf Coast. The Rattlesnake oil is of the same or even a higher quality than the Hogback and Table Mesa.

There will be offered at the coming sale four tracts adjacent to the Rattlesnake lease on the west as follows:

Tract 21, SW, Section 13-29-19, west 160 acres.

Tract 22, W half NW, Section 13, and E half NE, Section 14-29-19, west 160 acres.

Tract 23, W half SE, SW NE, SE NW, Section 11-29-19, west 160 acres.

Tract 24, W half NW, W half SW, Section 2; NW NW, Section 11-29-19, west 200 acres.

### Table Mesa, 750 Bbls.

The first well sunk on the Table Mesa lease struck water but subsequently, on going further east, a pool was encountered at 1,300 feet in the Dakota sands. So far four wells have been developed with a total production of about 750 bbls. It is too soon to forecast what will be the production of this lease, but it is apparently a very good property. The oil will be marketed through the Continental pipeline.

### 360-Acre Tract

A 360-acre tract adjacent to this lease on the northwest is to be offered at the coming sale. Lenticular conditions which promise oil are supposed to exist there. This is Tract 28.

No pay oil has yet been found on either the Tocito or Table Mesa leases, though there was a showing in the Beautiful Mountain well in the Shinarump conglomerate at 1,865 feet. The first 3,000-foot test well on the Tocito produced only artesian water. Further exploration is, however, being carried on in the northern part of this lease area. In view of the experience on the Table Mesa, it has been proven that no one test on any of these areas is sufficient, however careful the diagnosis of the geologists may have been.

### Three Near Tocito

Three tracts adjacent to the Tocito lease on the north will be offered. These are Tracts 25, 26 and 27, of 360, 360 and 400 acres area, respectively.

### Exploratory Leases

There will be offered in addition four exploratory leases as follows:

Tract E—Chimney Rock structure containing 4,800 acres. This is primarily a Dakota test situated in Sections 15, 22, 23, 27, 34 and 35, Township 13n, Range 17w, and Sections 2, 3, 4, 9 and 10, in Township 30n, Range 17w. It is north of the San Juan River a few miles from the Shiprock agency, presenting a complete closure, well identified, and in surface appearance very similar to the Rattlesnake. What is the extent of the closure is not certain but it seems to be as great as the producing area of the Rattlesnake.

Tract F—Biltabito structure, 3,120 acres. This is a very well defined and well known structure, about 14 miles west of the Rattlesnake, situated in extended Townships 30n, 20w, 30n, and 21w. A deep test will be required here, it being estimated that the top of the Pennsylvania series will be reached at about 2,800 feet. Oil has been found at the Boundary Butte structure about 40 miles northwest of Biltabito in the Shinarump formation above the Pennsylvania, and the prospects for production in this and other sands, even above the Pennsylvania are good at Biltabito. This structure is attracting a great deal of interest by the geologists of a number of the major companies.

Tract G—Royal Arch structure, 3,800 acres. This is a structure 14 miles west of the Rattlesnake, 9 miles across the New Mexico line in Arizona. It has been carefully studied by competent geologists and apparently presents a complete closure. The surface formation here is the Chin Lee and the test will be to the Pennsylvanian, which should be encountered in a somewhat shallower depth

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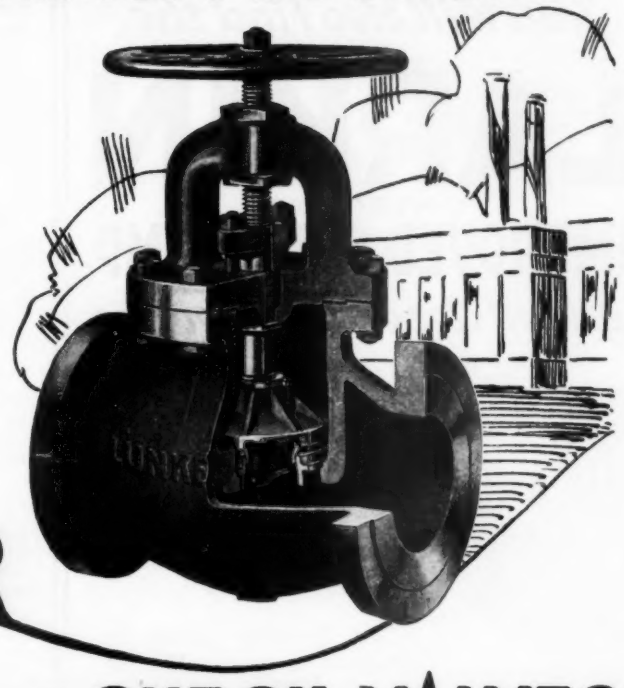

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than at Biltabito. It is a very beautiful structure at the base of the Lackachukai Mountains.

Tract H—Little Shiprock structure, 3,000 acres. This is a complete separate closure at the north end of the Beautiful Mountain anticline in Townships 27n, Range 19w, and 26n, Range 19w. While the Dakota is here very near the surface, the showings at Beautiful Mountain in the Shinarump and (as we believe) in the McElmo on the Rattlesnake, were sufficient to make all this area a very good gamble.

**Developments Encouraging**

The developments in the Shiprock Field of the Navajo Treaty reservation has so far been rather deliberate and conservative, but, taking it for all in all, extremely encouraging. The Government, as well as the lessees, have been very careful in their operations so as to prevent any damage to the field by water. It is probable that the development there is actually merely in its infancy and that it will take some time to fully prove out the field. On account of the volatile character of the crude and its remoteness from market, the actual amount so far marketed has not yet been very great. The total production to date has been 440,000 bbls., and the amount accruing to the Navajo tribal fund for the royalties and initial bonuses has been approximately $200,000.

**Five-Year Leases**

The leases will be for a term of five years and as long thereafter as oil or gas is found in paying quantities. Royalties on the exploratory leases will be a flat 12½ per cent; on the other tracts a graduated royalty from 12½ up to 16⅔ per cent. At the first Navajo sale a minimum depth of 3,000 feet was required for all the exploratory leases, but with the information we now have, this will be amended, requiring 3,000 feet in the case of the Biltabito and Royal Arch, and 2,000 feet in the case of the Chimney Rock and Little Shiprock. Most of the other leases contiguous to the present tracts will have a 1,000-foot minimum requirement.

**Ute Tracts**

There will be offered at the same sale two tracts on the Ute Mountain Reservation to be known as the Ute Tracts C and D, the first containing 4,800 acres and the second 4,500 acres. Tract C is in Township 31n, Range 15w, New Mexico Principal Meridian. Tract D is in Township 31n, Range 16w. Information about these tracts can be had by addressing Ed. M. McKean, superintendent of the Consolidated Ute Agency, Ignacio, Colo.

Further details can be secured at the office of Mr. Hagerman at Santa Fe, N. Mex.

## BUYING OF OIL COUNTRY GOODS WELL MAINTAINED

(Continued from Page 75)

an upturn in August. In those years shipments early in the year outran consumption and then there had to be liquidation. This year production and shipments have been in line with consumption right along.

**New Postwar Record.**

In point of tonnage the steel industry has made a new postwar record, for the production in the 18 months, December, 1924, through last month has been well above production in any other 18 consecutive months since the war. There have been heavy mill operations right along. The rate of production has been above the rate during the war, but the war brought a longer period of sustained production, and so the steel industry simply requires time to pass the war time record, and this it will do if production continues at anything like the present rate. While 1925 made a new calendar year record in production, this year has such a start now that it can easily pass 1925, even with a considerably lower production in the second half.

Outside of sheets and merchhant bars, there have been practically no price changes in important steel products for a long time. Mills announced an advance in merchant bars, $2 a ton, a couple of weeks ago, which would restore prices prevailing early in the year, but the advance is not yet fully established. Sheets have again weakened, and are now quotable at 3.10c to 3.15c for black, 2.30c to 2.40c for blue annealed, 4.30c to 4.40c for galvanized and 4.20 to 4.30c for automobile sheets. Nearly all the advances of late in the year have now been lost, and the market does not average $2 a ton above the low level that prevailed July to October inclusive last year.

Pig iron, coke and scrap are very dull.

## TESTING A SHOWING IN CHEROKEE COUNTY

CORSICANA, Tex.. June 12.—B. F. Farris, drilling a wildcat on the Fullwood tract, about 12 miles south of this city, found a shallow pay around 980 feet and the well is reported to have started at 100 bbls. a day.

Kerr & Gillette have abandoned their test on the Slaughter land, Dabney survey, Navarro county, total depth 2,863 feet.

The Humphreys Petroleum Corp., drilling No. 2 Ousley in Cherokee County, got a showing of oil at 2,385-2,409 feet in sandy shale, which looked so good that 8¼-inch casing was set at 2,385 feet so that the sand could be tested.

## SOVIET PRODUCTION

WASHINGTON, D. C., June 12.—Soviet oil production during the first half of the current Soviet fiscal year, was 3,783,000 metric tons, an increase of 16 per cent over the same period of last year, and oil exports for the period were 627,000 metric tons, an increase of 24 per cent, according to a report of the industry received by the Russian information bureau here. Production was 86.5 per cent of the rate for 1913 and exports were nearly 140 per cent of the rate for 1913.

Exports showed a falling off, as compared with last year, in kerosene and machine oil and big advances in crude oil, gasoline and fuel oil. Britain and her colonies are still the leading customers, taking 29 per cent of the exports, but showing a sharp falling off from last year's figure of 37 per cent. Italy received 28 per cent of the exports, a great increase over last year, exports to France doubled, reaching 17 per cent of the total, and exports to Germany remained stationary at 18 per cent of the total.

## S. H. WEEKS DIES

BOWLING GREEN, Ky., June 12.—W. I. Alexander, oil operator, of this city, received a telegram Tuesday, June 1, announcing the sudden death of his associate, S. H. Weeks, at Akron, Ohio. Alexander & Weeks have been engaged in the oil business in the Western Kentucky fields for some time. Mr. Weeks was also president of the Moran Oil Co. Mr. Weeks spent considerable time in the Bowling Green and Scottsville fields. He was 60 years old.

## KENTUCKY PRODUCTION

Production of crude petroleum in Kentucky during April, according to T. S. Scott, secretary Kentucky Oil Men's Association, was as follows:

| County— | Barrels |
|---|---|
| Allen | 23,179.97 |
| Barren | 23,774.38 |
| Bath | 1,213.87 |
| Cumberland | 2,890.56 |
| Daviess | 1,612.42 |
| Estill | 3,715.58 |
| Hancock | 2,810.61 |
| Hocking | 1,462.24 |
| Lee | 100,313.57 |
| Logan | 73.16 |
| Monroe | 439.04 |
| Ohio | 22,417.72 |
| Powell | 7,950.98 |
| Simpson | 874.17 |
| Warren | 38,323.84 |
| Wayne | 339.87 |
| Wolfe | 213.09 |

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Engine operates on gas, gasolene or both. Operating on natural gas it requires about 4000 cu.ft. in 24 hrs.

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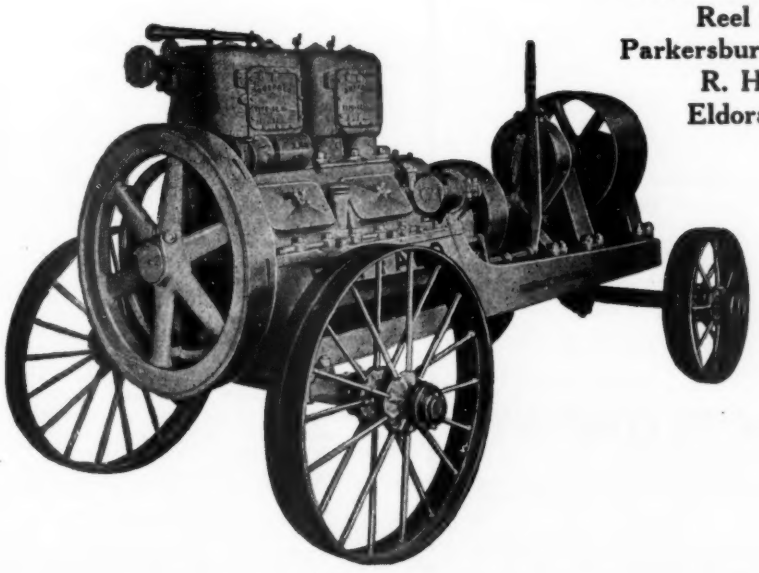

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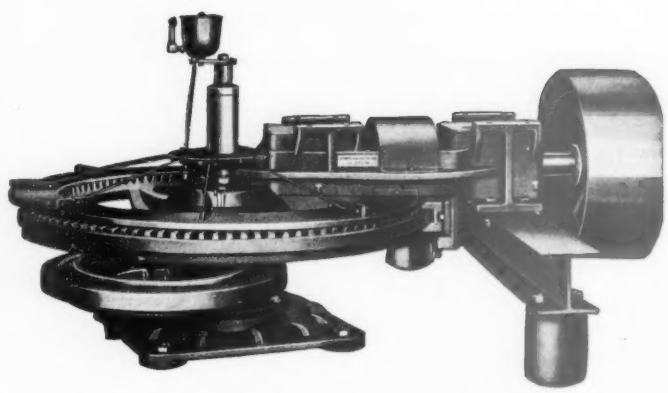

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# MATERIAL ACTS DIFFERENTLY UNDER ONE TIME LOAD AND REPEATED STRESS

**By William H. Laury**
*Research Engineer, Axelson Machine Co.*

The strength of oil field equipment as related to iron and steel products is commonly determined by tests under a load gradually increasing from zero to the ultimate of the test specimen. In nearly all computations of stress and strain the basis of the computation is the action produced by a steady load applied but once. For a long time it has been recognized that under loads repeated many thousands of times the behavior of material might be quite different from the behavior under a single application of load. The growing use of high speed well drilling machinery and the increased heavy pumping conditions have been especially influential in recognizing the strength of materials under repeated stresses.

In a general way the difference in the behavior of the material under repeated loads and under a single load (or a load applied only a few times) is shown by the tendency toward gradual breakdown of the serving part under the repetition of the load. Under a single application of load the material making up the equipment either withstands the load or it fails; under load repeated many thousands of times the material may withstand the load for a while and then fail by the gradual spread of cracks or other local injuries to the material Under repeated load, strains, which would be of no importance if but one loading were to be applied, may form a nucleus for damage which gradually spreads until the whole member fails.

### Fatigue of Material.

The failure of such equipment under stress, such as drill pipe, crank pins, sucker rods, etc., has come to be commonly spoken of as due to "fatigue" of the material. The cause of such failure was thought to be "crystallization" of the metal, but it is here well to note that the phenomenon is one of a breaking up of crystals rather than of their formation. The development of the internal combustion engine, the steam turbine, the automobile and the airplane have made this problem of fatigue of materials of increasingly marked moment during recent years.

A fatigue failure is characterized by the complete absence of elongation or deduction of area at the break. The fracture is sudden and similar to that which is ordinarily expected only from brittle materials. A rotating beam will crack at right angles to the length of the beam failure which is also at right angles to the direction of the stress.

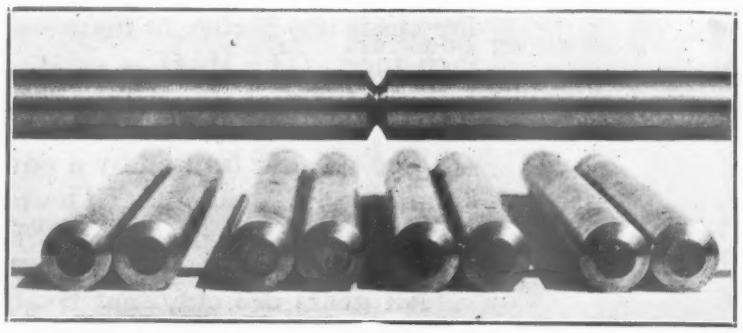
Metals while being subjected to fatigue have been observed under the microscope and it has been found that the crystals of which a metal is composed will allow deformation to occur by movement along certain gliding planes within the crystal. This gliding or slipping is indicated by the appearance of lines running across the crystals and are commonly termed slip bands. As the stress of the material in fatigue is continued the slip lines become more numerous and also broaden. Finally some of these bands develop into a crack which spreads to other crystals and thus causes failure.

It appears, therefore, that the primary cause of fatigue failure is localized deformation. This deformation in any particular crystal is very small in amount and apparently even with very accurate and sensitive extensioners one cannot detect the deterioration which is going on.

Because steel is made up of many minute crystals the structure is not likely to be homogeneous. Furthermore, there may be microscopic flaws throughout the material. Somewhere, due either to nonhomogeneity or to flaws, there will be high local stresses and at such places the material will be most likely to deteriorate by repeated action of fatigue stresses.

### Testing Machine

In determining the resistance of metals to fatigue the machine, as used in the laboratory of the Axelson Machine Co., is of the rotating beam type. This type gives reversals at a very definitely known bending moment and there is a considerable portion of the specimen under constant bending stress. The specimens as used are of standard design, being that of a straight rod slightly reduced in the middle portion of its length. The machine applies completely reversed stresses at the rate of 1,000 per minute and operates continuously for 24 hours a day. The number of cycles of stress is recorded by a suitable tachometer.



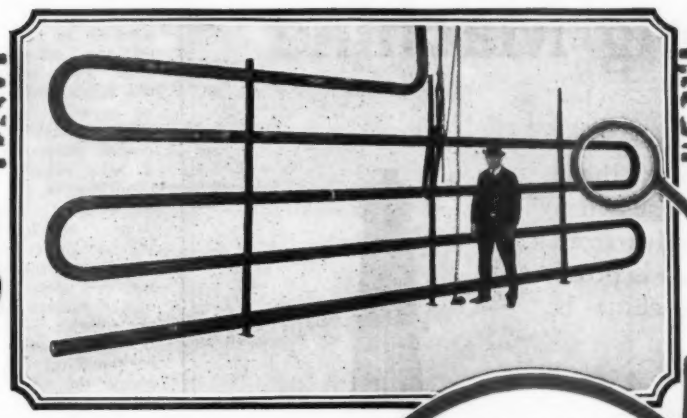
**Actual test bar samples fractured in fatigue machine in the Axelson factory.**

### Localized Stress

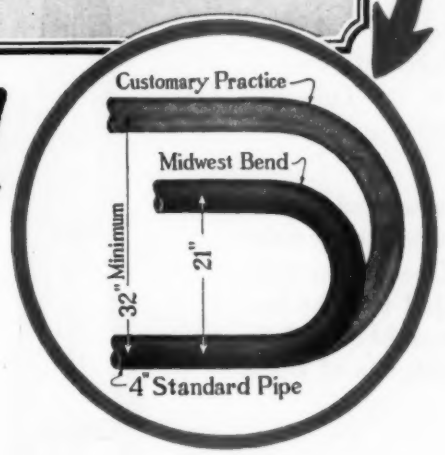
One outsanding feature of fatigue phenomena in metals is the importance of small localized stresses. Because their derivation depends on mathematical processes it is easy to come to regard the ordinary formulas for computing stresses in machine and structural parts as exact; yet in computing the stresses as applied to sucker rod materials a dynamometer or hydraulic load indicator was developed by the Axelson Machine Co., to accurately determine the existing loads during the cycle of motions of a pumping well.

**Cross section of sucker rod showing the start of a progressive fatigue break which developed while rod was in service.**

As a matter of fact such computations of stresses give only the general conditions of service, and neglect the existence of hundreds of localized stresses affecting minute areas. Here again is the fact that with the proper laboratory equip-



# 34% of Space Saved




A NATIONALLY KNOWN oil refining company required a large quantity of condensing coils made from 4-inch standard weight steel pipe. Return bends were not wanted due to the possibility of leakage through joints and threads. The center-to-center distance desired was 21 inches, which necessitated the very short U-bend radius of 10½ inches—as indicated by the sketch above, the minimum radius of customary practice is 16 inches.

One of the country's largest pipe fabricators stated positively that these short radius bends could not be made. Midwest Engineers, however, developed a special method which successfully produced the bends as desired. Midwest Piping Service thus reduced the coil center-to-center distance 34% and effected an equal saving in space and made a corresponding reduction in the cost of the coil tanks.

All joints of these condensing coils have two courses of electric welding—the first course was thoroughly caulked with an air hammer. The coils were subjected to severe hydrostatic tests before shipment.

* * * *

If you are confronted with a piping problem, the Midwest Piping and Supply Company can be of very definite service to you. This organization devotes its entire ability, energy, and time to pipe fabrication and the solution of piping problems. Our engineers are trained "pipe men" and their long and varied experience is at your command.

* * * *

And if you know exactly what piping you require, we will follow your instructions accurately and intelligently.

*So—write, wire or phone for Midwest Service when you need fabricated piping.*

## MIDWEST PIPING & SUPPLY COMPANY

**1400 So. Second St., St. Louis, Mo.**

**CHICAGO OFFICE: 208 So. La Salle St.** **TULSA OFFICE: 805 Mayo Bldg.**

*Fabricators of Oil Refinery, Natural Gasoline Plant and Power Piping*

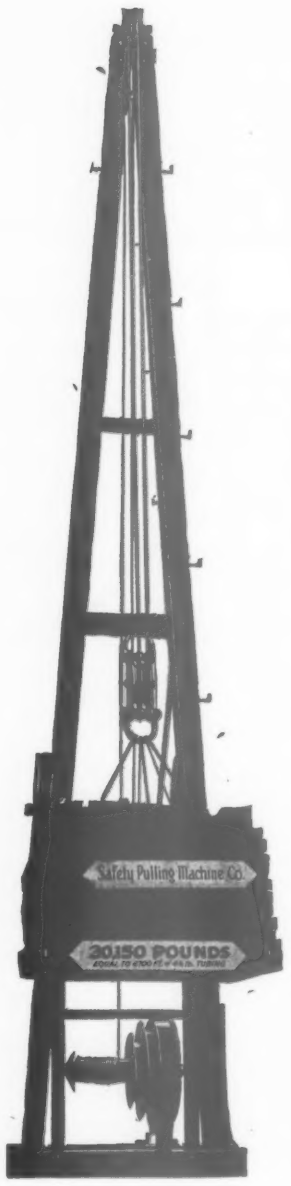
## MIDWEST Piping Service

# Eclipse Deepwell Pulling Machine

That one company recently purchased 6 of these machines to be used in a country 6,000 miles from the United States is proof this Pulling Machine is good.

Eclipse Deepwell up to 8000 ft. 2″ Tubing Weight .....3645

**Wreckers also made to order, approximate weight 5000 lbs. One of our customers stated that he has pulled a weight equal to 100 tons with one of these machines.**




Specifications Deep Well

Mast 8x10x36 ft., Douglass Fir A-Style Two Wheel Truck, two 16″ Bronze bearing crown pulleys, 2½ Steel Pin mounted in malleable boxings. Large supporting plate 16″ dia. between crown pulleys, eliminating any chance of bending pin.

Reel or Drum; 32 lb. 8¼ casing filled with concrete for winding drum, differentials banded with 3/16 band iron, brake surface 6″x40″, choke brake style same as Star drilling machine.

The whole reel assembly is mounted on 2¾ square steel shaft extending clear through reel, secured by three heavy castings.

For sale by all Supply Companies

Manufactured by

**SAFETY PULLING MACHINE COMPANY**
INDEPENDENCE, KANSAS


ment, efficiently applied, the product of a concern can be safeguarded and confidence in its finished article maintained.

So long as a member is subjected to static load, or if the load on it is repeated only a few hundred times in its life, these localized stresses do no particular harm; the area affected is very small; the general deformation of the member is not appreciably influenced; and the load carrying burden is shifted from the minute overstressed areas to the large normally stressed areas with no appreciable increase in the distress of the member. Under a loading repeated thousands of times as the case actually exists in a pumping well, the condition is all changed. The minute overstressed areas form centers of damage which spread in the form of microscopic cracks, and at the end of each crack there is a region of high localized stress which causes the spread of the damage to continue and the failure follows.

This spreading of structural damage in the form of microscopic cracks explains the suddenness of failure under fatigue. A bar of Axelson sucker rod steel we have found, may be bent double without cracking, but if it be cut half across by a fine saw cut and then bent, it snaps at the saw cut.

The miscroscopic cracks through metal under repeated stresses are equivalent to little saw cuts which gradually join each other, and damage is done.

We must, therefore, characterize a mechanical contrivance not so much by the brute endurance and strength but by the amount of continuous usefulness it may give in service, such beneficial value in service only being characterized by the necessary precautions to be taken by the use of the best product, the proper installation, the utmost precaution to avoid abusive service and resulting finally in a satisfactory life usefulness of the product.

## TETRAETHYL LEAD AND FLUID REGULATIONS

(Continued from Page 82)

next few months at least, is to be brought about by the latter method.

**Influence of Cracking**

With a reasonable certainty that kerosene prices are not to bring about high distillate quotations from refiners it is now possible to consider distillate price trends from the standpoint of the product's value as charging stock for cracking units in refinery operation. Most refiners agree that the potential value of the distillate cut from crude oil as gasoline secured in cracking is much more important than its worth as kerosene in the skimming process.

The overheard cut secured in skimming from kerosene down to the fuel oil residuum is satisfactory charging stock for cracking equipment at most refineries in the Mid-Continent. This results in a charging stock around 32 degrees gravity extending down from the light distillate ends to as heavy fuel oil ends as the operator sees fit to take overhead in his skimming operation.

From this method of operation comes the value of distillate as charging stock. The writer has found that with the present price of gasoline, the refiners estimate the value of this distillate cut for cracking from 4½ to 6½ cents a gallon at their plants. In other words, according to their statements they prefer to keep their distillate yield at their refineries for cracking if they cannot secure more than 4½ to 6½ cents from outside buyers.

At first thought it might appear that the value for cracking establishes a minimum price for distillates as furnace fuel. There are, however, two or three qualifying factors. On June 1, in the Mid-Continent Field (Oklahoma, Kansas, North-Central Texas, North Louisiana and Arkansas) there were 49 refineries in operation without cracking processes. These plants were running to stills 56,000 bbls. daily. This does not include several refineries where the cracking units are being installed but are not yet in operation.

**As Potential Gasoline**

These refineries can furnish a substantial part of the distillate requirements of the independent jobbing interest in the Middle West. They can either sell the distillate cut to jobbers as furnace fuel or they can dispose of it to refiners with cracking equipment. However, when the latter buys the product he must add from 1 to 2 cents to the cost at his refinery to cover transportation charges. This cost is more when the distillate is moved to refineries located outside the Mid-Continent.

This leads to the conclusion that, in general, distillate prices will be determined by the potential value of the product as gasoline at the refinery without a cracking process. There is the further fact that not all refineries have cracking capacity sufficient to justify them in adding the distillate cut to their charging stock. When the cracking capacity is limited it will usually be more profitable to confine the charging stock to cuts below the distillate yields which are of less value for other uses. In these cases the distillate yield is available to the jobbing trade the same as the output of the refinery whose operations are confined to skimming.

Finally there are certain products secured in the operation of the average cracking process which are also factors in determining the value of all furnace oils. Cracking operations vary as do the skimming operations but in the operation of most cracking units a product is obtained which either is suitable for furnace oil or can be made so by blending with some other product. In some plants it is secured in rerunning the pressure distillate while at other refineries it is a residue product of the main cracking operation.

A few cracking plants produce only coke and gasoline but, as a general proposition, it can be said that at most plants a product is secured in cracking plant operations which the operator can profitably sell as furnace oil. This is especially true where the original charging stock is an overhead product containing distillate.

**Specifications**

Discussing the distillate yields in cracking naturally brings up the question of specifications, the main source of complaint heard from refiners. The cracked distillates generally have a flash higher than the usual specifications asked by jobbers. Due to this fact it is necessary to blend the cracked distillate with a naphtha or some higher priced product before the product can be sold.

Refiners agree that this flash test should be above 200 degrees Fahrenheit to enable them to furnish a product at a minimum price. Jobbers often require a flash as low as 150 to 160 degrees Fahrenheit. According to the refiners, the jobbers will find that the oil burners of their customers will handle the higher flash grades satisfactorily. Odor and color are other specifications which the refiners claim often times have no significance from the standpoint of fuel value.

These complaints in regard to specifications at least merit the consideration of the jobbers. Getting together with refinery connections with some concessions in regard to specifications might result in agreements for the coming year of benefit both to the buyer and seller.

**Demand to Increase**

Reports from all sections indicate that there will be a large increase in distillate demand during the coming season. The satisfied users far outnumber those of the opposite opinion and the burner manufacturers are rapidly increasing the number of installations.

Leod D. Becker, secretary of the American Oil Burner Association, speaking before the Federal Conservation Board at Washington two weeks ago, estimated that the furnace oil demand the coming season would be 6,000,000 bbls. greater than the season just closed. This represents an increase of approximately 35 per cent for the coming season.

South Penn Oil Company

Mannington, W. Va.
January 19th, 1926.

Mr. T. W. Bell,
Parkersburg, W. Va.

Dear Sir:-

Replying to your letter, regarding the B. & R. Wire Line Clamps, I am very glad to say that I consider them the best clamp in every way, on the market.

We have quite a number of them in use, and I am not specifying any other make.

Yours very truly,
Supt. Drilling.
J. F. Blair

HOPE NATURAL GAS COMPANY

Clarksburg, W. Va.
January 14th, 1926.

Mr. Thos. C. Rogers,
2321 Ohio St.,
Parkersburg, W. Va.

Dear Sir:

In answer to your letter of January 9th, I am very glad to recommend the Bell & Rogers Wire Line Clamp.

I do not think there is a clamp on the market that is its equal, either for gripping the line or for durability, and as you say, I must have been satisfied with the clamp or I would not have ordered the heavy one made from this pattern.

Yours very truly,
A. L. Taylor
ALT:h

# What Users Say about

COMPAÑIA TRANSCONTINENTAL DE PETROLEO, S. A.
TRANSCONTINENTAL PETROLEUM CO.
APARTADO 657.
TAMPICO, TAMPS., MEXICO

Panuco, Veracruz, Mexico.
January 22, 1926.

Mr. T. W. Bell,
1915 Spring Street,
Parkersburg, W. Va.
U. S. A.

Dear Sir:

Referring to your inquiry as to the service we are getting from your clamps, I wish to state that our experience has been very, very satisfactory.

There are several features that your clamp possesses that have proven very advantageous. We have noted considerable saving in time in using this clamp as we find that we can quickly and easily change the links at the well, and we also note that the slips are likewise easily and quickly changed.

The gripping power is just about all that one can expect or that one ever needs, and while your clamp is light- a feature also desired - it has held up, completely, under heavy duty.

Taken all in all, simplicity, fewness of parts, etc, we might say that it would be pretty hard to beat, and until some thing newer and better comes out, we would not make any change.

Yours very truly,
R. B. Kester
Superintendent.

RBK/h-

The Carter Oil Company
Bromley Ohio
January 18, 1926.

Mr. T. W. Bell,
1915 Spring Street,
Parkersburg, W. Va.

Dear Sir:

I have your letter of recent date with reference to your wire line drilling clamps and am only too glad to offer the following information concerning them.

We have used your style clamps very extensively and know them to be of the highest quality. We have compared them with other patents used in this field and regard them as far superior to any other. Their simplicity of structure, operation, replacement of parts and strength make them the ideal drilling clamp. As an indication of their strength and gripping power, I recall on one occasion swinging three strings of drilling tools at a depth of 3600 feet. Their other merits are scarcely less noteworthy.

Trusting that the above information will meet your requirements and with best personal regards, I am

Very truly yours,
L. J. Lauty.

Price, $65.00
F.O.B.
Parkersburg

The Carter Oil Company

To Whom It May Concern

I have been using the B. & R. Wire Line Drilling Clamps for several years, and I say without the least hesitancy whatever, that the B. & R. Clamps are absolutely the best clamps that I have ever used, and I have used them all.

They are not a heavy clamp, but they do the work of a heavy clamp very satisfactorily. They are very simple in construction, tremendous gripping power, liners or slips easily and quickly changed, the little slip retainers which are also used in gripping sand line in jarring baller loose or running bumper are very handy, simple ready, and this clamp weighing only 170 lbs. is a very attractive feature. I have drilled lots and lots of wells 4000 ft. and over with these clamps and must truthfully say that the B. & R. Clamps are the best holding or gripping Clamps I ever used, and require least tightening of the set screws.

Yours very truly,
R. B. McKean
Drilling Supt., The Carter Oil Co.
Eastern Division.

The B&R Wire Line Drilling Clamp

Buy at
Your Supply Store or
Direct

DEALERS:
If you have not stocked this clamp you are losing sales. Write for dealers' offer.

# ACME FISHING TOOL CO.
## Parkersburg, West Virginia.

**Export Office: 136 Liberty St., New York City, N.Y.**

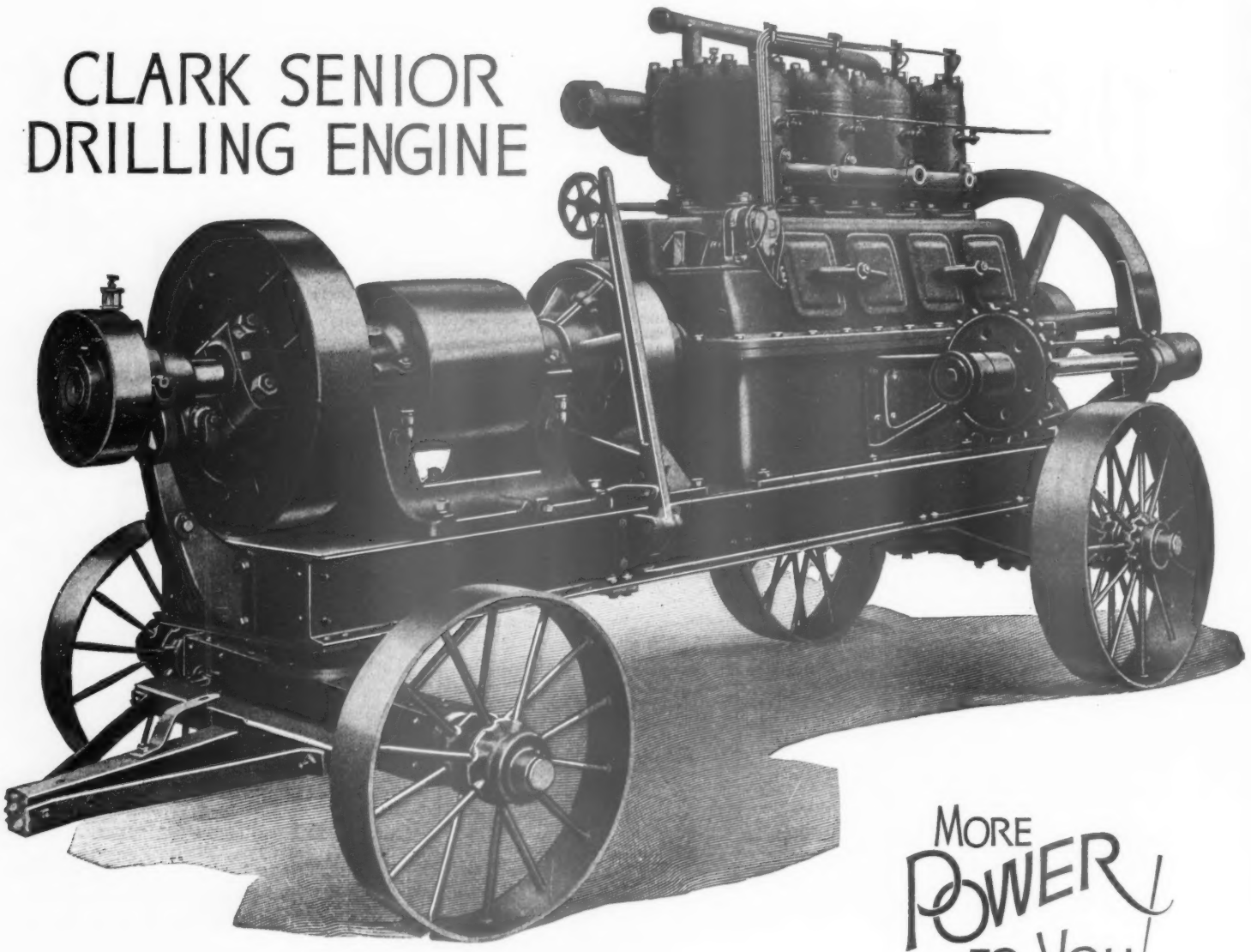
**Warehouses and Distributors:**

Midland Iron Works—Billings, Montana.
Great Northern Tool and Supply Co.—Kevin, Montana.
Acme Rental Tool Service Co.—Graham, Texas.
Acme Tool Company, Albany, Texas.
Acme Fishing Tool Co. of Texas—Vernon, Texas.
Acme Tool Company—Cross Plains, Texas.
Acme Tool Company—McCamey, Texas.
Acme Fishing Tool Co.—Tulsa, Oklahoma.
Acme Fishing Tool Co.—Okmulgee, Oklahoma.
Logan Foundry and Machine Co.—Logan, Ohio.
Elms Bros. & Co.—Waynesburg, Pa.


XUM

# Let the Clark Contractor Drill

CLARK SENIOR
DRILLING ENGINE



MORE POWER TO You!

CLARK GA

# Engine-Equipped Your Wells—

## These Drilling Contractors offer Better Service for Less Money

Abell & Rhodes, Eureka, Kans.

Abell & Shull, Eureka, Kans.

Corzelieus Bros. & Taggart, Big Spring, Texas

Wm. H. Dunning, Jr., Fort Worth, Texas

J. W. Grant, Fort Stockton, Texas

Wm. Hotalling, Artesia, Texas

Little & Graham, Breckenridge, Texas

D. J. Lewis, Big Lake, Texas

McCoy & O'Reilly, Big Lake, Texas

C. A. (Stoney) Martin, Kent, Texas

McQueen & Soper, Rankin, Texas

Northup & Carey, Sterling City, Texas

Thos. Owens, Santa Anna, Texas

J. F. Quimby, Fort Stockton, Texas

Richmond Drilling Co., Big Lake, Texas

Sloan-Ownes & Stalker, Westbrook, Texas

J. F. Swingle, Cisco, Texas

Scott & Ross, Tulsa, Oklahoma

E. T. Williams, Los Angeles, Calif.

(Pecos County, Texas)

Wilson & Gordon, San Angelo, Texas

Wagoner & Cowan, Gotebo, Okla.

Victor E. Wagner, White Deer, Texas

Rowland & Klinger, Toyah, Texas

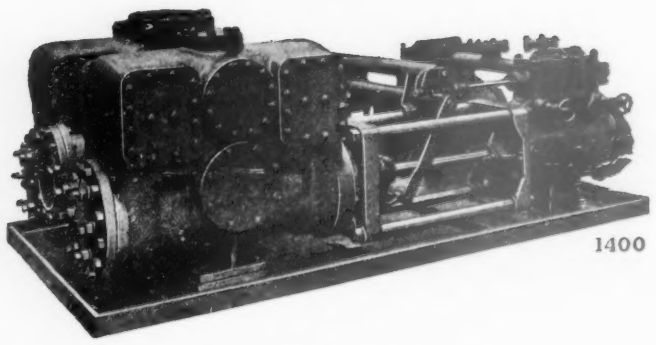
### SALES AND SERVICE

GAS ENGINEERING & CONST. COMPANY
125 W. First Street,
Tulsa, Oklahoma

SMITH-BOOTH-USHER COMPANY
228 S. Central Ave., Los Angeles
50 Fremont St., San Francisco

# AS ENGINES

# How Hot Is Hot Oil?




Four or five years ago, "hot oil" meant a temperature of around 200 or 300° F. Then it started upwards. Now it means any temperature from say 300 to 1000° F.

Pumping hot oil is hard on rod packing, and leaky packing means danger of fire and sometimes to life. Such a condition must not be latent on any TRANSIT PUMP. Therefore, every TRANSIT Block Valve Pump for Hot Oil work will be equipped with new deep fluid cylinder stuffing boxes containing lantern glands.

Any possible leakage past the packing is trapped in the lantern gland and piped back to the suction again without coming in contact with the air.

Our Block Valve Pumps will handle hot oil up to 600° F. in temperature, and up to 300 lbs. working pressure. Above that, and up to 1000° F.—1000 lbs. pressure, we always offer our new Hot Oil Pump.

*Bulletins on both the Block Valve and the Hot Oil Pumps on request*

NATIONAL TRANSIT
PUMP & MACHINE CO.
OIL CITY, PA.

DISTRICT OFFICES:

New York Philadelphia Pittsburgh
Cleveland Tulsa Houston Denver


# LAWS RELATING TO OFFSET WELLS DESCRIBED SIMPLY FOR OPERATORS

By Lawrence Mills

The word "offset," in the vernacular of the oil man as well as in the phraseology of law, has a double significance; it embraces the elements both of an asset and of a liability, depending upon the value of the abutting well. The ownership of the offset location carries both a right and an obligation, to drill the offset. If the well is a good one, the obligation is merged in the right and the lessee needs not the spur of the lessor to move him to action. If, however, the well is an uncertain quantity, then the obligation intrudes itself upon the mind of the lessee and he becomes concerned with the question of his duty to offset it. It is this question of when, and under what circumstances, the lessee owes the duty to the lessor to drill the offset that I propose to discuss; and I am convinced that there is no question which arises in the usual course of operations about which the average producer is so poorly informed, or concerning which such information as he has is as unreliable.

Most producers have formed their opinions upon the subject as the result of a lawsuit with which they were familiar. This suit, more than likely, occurred in some other state, or at least involved some other field, than the one in which they are now operating. From that experience, they have formulated a theory which they apply under all circumstances and conditions. The customary manner of expressing the proposition shows the confusion of thought on the subject. There is no duty to offset. The obligation is to prevent substantial drainage from the leased premises. This, of course, can be accomplished only by drilling a well in such relation to the adjoining well that the oil or gas, which would otherwise be withdrawn through it, may be produced through the offset well. While the obligation results in the drilling of the offset, the primary duty is to prevent drainage.

**LEGAL SUBJECTS OF GENERAL INTEREST**

Mr. Mills is a practicing lawyer of Tulsa, having recently moved here from Oklahoma City. He has specialized in the subjects of Indian land law and oil and gas. His book, Oklahoma Indian Land Law, has long been a recognized authority upon the subject. He is also the author of the Law of Oil and Gas, which has recently been published by Callaghan & Co. of Chicago. Mr. Mills has agreed to contribute a series of articles upon different phases of the law of oil and gas, which will appear in The Oil and Gas Journal from time to time.

### Preventing Drainage

The duty to prevent drainage is not one which arises under the express provisions of the lease. Although there have been some leases which have undertaken to make specific provision for offset wells, no standard form of lease in use in the oil-producing states attempts to regulate the matter by express agreement. Nor is it covered by statutory enactment in any of the states except Kentucky. A statute of that state provides for the drilling of offsets to all producing wells, situated within 200 feet of the line. Insofar as it affected leases in force at the time of its passage it has been held unconstitutional. It is one of the implied covenants, or agreements, which the courts have read into the lease in order to give effect to the contract which the lessor and lessee have entered into.

If a land owner leases his land for agricultural purposes, for a share of the crop, although the lease may, and usually is, silent on the subject, the law will read into the agreement an implied covenant, on the part of the lessee, to prepare the soil for the planting, to plant the seed at a seasonable time and to cultivate the land in a workmanlike manner. Likewise, in a lease of solid minerals, like coal or iron, there is an implied covenant (in the absence of a specific provision on the subject) to test the land within a reasonable time and to develop and operate it, if it is productive.

With respects to these covenants, the law of solid minerals and of oil and gas is identical. But, in the case of oil and gas, there is another implied covenant which does not obtain in the case of solid minerals; a covenant to protect the land from drainage. The reason why this covenant is implied in one case and not in the other is obvious. Solid minerals are incapable of being removed from the place they occupy in the earth by drainage. Oil and gas, however, are more or less migratory and may be attracted from their place of lodgment under the leased land to wells opened upon the adjoining lands; in which event, the lessor has lost the royalty, which he would have received if they had been produced through wells upon his land. The lessor cannot drill a well upon his land. He is, therefore, reduced to the necessity of submitting to the loss of the royalty, upon the oil and gas which could have been produced upon his land, by the drilling of timely wells, unless such wells shall be drilled by the lessee. But the lessee may own the wells upon the adjoining land, or for some other reason, be disinclined to drill. Thus, the very consideration which induced the lessor to enter into the lease would be defeated, without a violation of any express provision of the lease. For this reason, the courts have read into the lease an implied agreement, upon the part of the lessee, that he will prevent substantial drainage by the drilling of offset wells.

### Is Qualified Duty

This covenant is implied by the courts for the purpose of preventing fraud, or injustice, upon the lessor; it is not intended as an instrument in his hands for perpetrating an injustice upon the lessee. The duty to protect from drainage is not an absolute, but a qualified, one; and is determined by a consideration of the interests of both parties, viewed in the light of all the facts and circumstances. The lessee is under no obligation to drill a well, where the loss will be borne by him and all the benefit accrue to the lessor; but only where he can, himself, make a profit from the operation. If the production from the abutting well is not such as can r e a s o n a b l y be expected to make a profit, considering both the cost of drilling and equipping and of operating it, the lessee is under no duty to offset it, regardless of its location. The covenant to protect from drainage cannot be converted by the lessor into a device to compel the lessee to wildcat a location, in the sanguine hope that the offset upon his land will prove more productive than the well upon his neighbor's land. This is often the motive which prompts the demand for an offset. The lessee, so far as this covenant is concerned, is entitled to accept the adjoining well as a test of his offset location.

If the abutting well is in paying quantities, other factors then enter into the duty of the lessee. He is not obligated to prevent all drainage, however slight, but only substantial drainage. In this connection, the proximity of the abutting well becomes important, as affecting the amount of drainage from the leased land. The porosity of the producing sand is also important, as it is obvious that if the stratum is soft and porous a larger area, surrounding the well, will be subject to

# Rust-forming elements *are powerless* against a protective shield of red-lead

THERE is one sure way to combat the forces of corrosion—one sure way to get the longest service from your steel tanks. Paint them with pure red-lead.

Pure red-lead is used generally for metal protection in the oil industry. That this is so, is shown by the answers to a questionnaire recently sent by a well-known oil paper, to oil men in the Mid-continent, Pennsylvania, Texas, and California oil fields. Of the fifty-three men who answered, thirty-two (or sixty per cent), said they use, specify or recommend pure red-lead for the protection of metal surfaces.

### *Many prefer Dutch Boy red-lead*

Many of the oil men answering the questionnaire said they use Dutch Boy red-lead exclusively. This red-lead is the highest grade obtainable. It effectively prevents the rusting of steel equipment. It sticks tight to metal, is impervious to air and moisture, and does not chip or scale. It forms a tough, durable, film that expands with heat and contracts with cold—without cracking.

You can get Dutch Boy red-lead in both paste and liquid form. The liquid comes in the natural orange-red color for coats next to metal, and also in greens, browns and black for finishing coats. The paste is obtainable in the natural orange-red color and may be shaded to any desired dark color.

### *What Paint-Users Say*

Representative gas men, engineers and oil men were asked in a questionnaire what paint they use for protecting metal. An overwhelming majority answered "pure red-lead." Here are the figures:

32 out of 53 oil men.
78 out of 93 gas men
179 out of 206 engineers

### *White-lead cuts evaporation*

When you want finishing coats of white or light-colored paint to reduce heat-absorption and decrease oil-evaporation, use Dutch Boy white-lead on top of an undercoating of Dutch Boy red-lead. Dutch Boy white-lead is well-known for its weather-resisting properties.

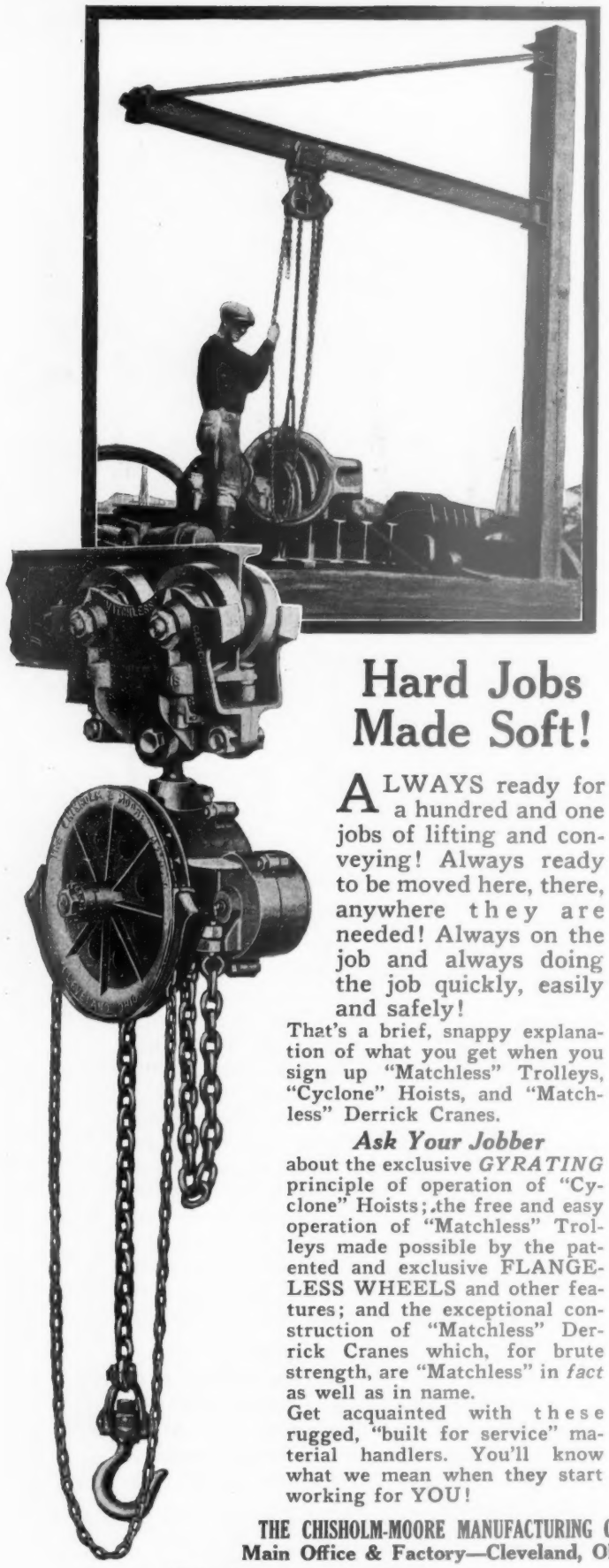
We shall be glad to help you solve any question of metal surface protection. Specialists in our Department of Technical Service have made a study of paint for metal in the oil industry. They will be glad to give you any help that you may require. Address them in care of nearest branch.

For oil-refining you want litharge of correct physical character and extreme chemical purity. Such litharge is made by the makers of Dutch Boy red-lead and Dutch Boy white-lead. At all times you can rely on its unvarying uniformity. Our nearest warehouse can give you quick shipment in any quantity you desire.

NATIONAL LEAD COMPANY

New York, 111 Broadway — Boston, 131 State St.
Buffalo, 116 Oak St. — Chicago, 900 West 18th St.
Cincinnati, 659 Freeman Ave. — Cleveland, 820 West Superior Ave.
St. Louis, 722 Chestnut St. — San Francisco, 485 California St.
Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Ave.
Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut St.

DUTCH BOY RED-LEAD



Hard Jobs Made Soft!

ALWAYS ready for a hundred and one jobs of lifting and conveying! Always ready to be moved here, there, anywhere they are needed! Always on the job and always doing the job quickly, easily and safely!

That's a brief, snappy explanation of what you get when you sign up "Matchless" Trolleys, "Cyclone" Hoists, and "Matchless" Derrick Cranes.

*Ask Your Jobber*

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drainage, than if it is hard and compact. If the field is spotted, the proximity of the well would also be taken into consideration in determining the probability of securing production in the offset well.

If the abutting well is a good one, of course, the interests of both parties demand that it be offset as soon as possible, and there is no occasion for disagreement. If, however, it is upon the border line of success or failure, then the conflicting interests of the lessor and lessee assert themselves. Naturally, the lessor, who bears no part of the cost, and has everything to gain and nothing to lose, is most insistent that the offset be drilled. Naturally also, the lessee, who must bear the loss, if one is sustained, is more inclined to balance the probabilities of profit or loss. It is under these conditions that it becomes necessary for the courts to hold the balance between them.

**Duty of Lessee**

The yardstick for measuring the duty of the lessee, under the circumstances, is neither the extravagant and optimistic expectations of the lessor, nor the unreasoned timidity and pessimism of the lessee. The test, would a reasonably prudent operator, acquainted with all the factors of affecting the probability of securing paying production, considered as a separate and independent venture, feel justified in drilling the offset, in the expectation of realizing a reasonable profit from the enterprise? If he would, the lessee is bound to drill the well, or to suffer the consequences of cancellation or damages. If he would not, the lessee is under no such obligation, although the well upon the adjoining land is so situated, with reference to the leased land, that it may be presumed to be draining it to some extent. What the hypothetical prudent operator would do, under the circumstances, is, of course, a question of fact for the court or jury to determine.

From what has been said, it is apparent that there is no fixed and arbitrary standard for determining the duty to offset. In theory, at least, it varies, in accordance with the circumstances of each case and with the conditions of each field. It may be customary, in the particular field, to drill the wells 300 feet apart; in each case, 150 feet would be the conventional offset. But this custom of practice is not conclusive. Circumstances might easily require the offsetting of a well more than 150 feet from the line, or excuse the offsetting of 150 feet from it. The proximity of the abutting well is one of the factors to be considered, but only one.

Nor can the duty of the lessee be reduced to a standard upon the basis of the amount of production secured from the adjoining well. In order to justify the demand for the drilling of the offset, the well to be offset must be a paying one. A paying well is one which will make a profit upon the cost of drilling, equipping and operating it. Consequently, the production must be considered with relation to the cost. The cost varies with the depth, the difficulty of penetrating the intervening strata, etc. The lasting quality of the production, the grade of the oil and many other factors must be taken into account. A 10-bbl. well may be a paying well, under certain conditions, whereas a 100-bbl. well, under other conditions, may be incapable of yielding a profit to its owner.

**Standard Indefinite**

While the standard of the prudent operator is indefinite and, in certain respects, unsatisfactory, it is the best that the courts have been able to formulate. The standard must, in the nature of things, be elastic and capable of being adjusted to the varying conditions, not only of the different leases in the same field, but of the different fields as well. But this very elasticity makes it difficult for the lessee to measure accurately his duty with respect to offsets; and not the least of the perplexities which it introduces is the uncertainty of the action of the court or jury. Practical operators in the same field, with equal experience and opportunities of knowing the conditions, often disagree upon the advisability, as a business proposition, of offsetting producing wells. One would not hesitate to drill, where another would not give the proposition serious consideration. If the operators disagree, it cannot be expected that the courts, or juries, who know little of the practical side of the oil business, and whose sympathies are naturally with the lessor, who is their neighbor, should be consistent, or always fair, in their decisions.

The lessee is often confronted with the alternative of drilling an unprofitable well, or of jeopardizing his lease, or of subjecting himself to damages, if the court should decide he has breached his implied covenant for protection from drainage. In such a dilemma, he is under the necessity of determining the course he will pursue, without other guide than such as he may derive from a consideration of the many diverse and uncertain factor that enter into the question. Before he decides to drill the well, or to hazard the result of a suit, however, he will do well to discard all the formulas for determining when an offset is due, that he may have brought with him from other fields. They will only serve to mislead him.

## VENEZUELA FIELDS

(Continued from Page 48)

most veterans of the Mexican Fields, is transferred to the land department. Mr. Nabors has been for the past eight months in charge of the Cabimas camp.

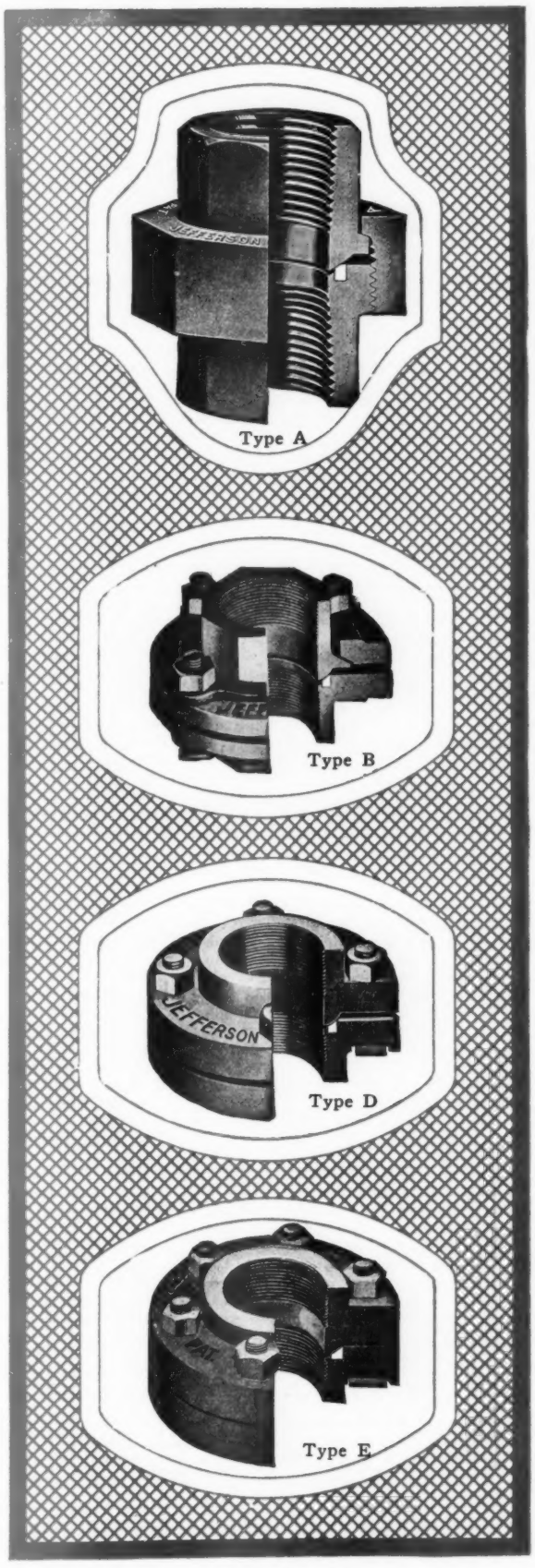
On the night of May 12 the safe in the office of the Standard of Venezuela was opened and 80,000 bolivares ($16,000) stolen. This is the first robbery of consequence that has occurred in Venezuela.

**Venezuela Wildcats**

Among the wildcats, No. 1 Geneva is going slowly, due to boiler trouble from bad water. It is drilling at 1,605 feet. No. 1 Malt, in the District of Miranda, is waiting for water. No. 1 Lenan is drilling at 2,300 feet. No. 2 El Menito is still fishing. No. 6 Mara is completed at 1,002 feet for geological information. No. 7 Mara was spudded on May 5 and is at 624 feet. This is another structural well and will be completed at about 1,000 feet. Gulf's No. 1 Lago at Lagunillas is in for a good well. At 3,493 feet 3-inch liner was run with about 400 feet of perforated. Between 400 and 500 feet was bailed and in it came for a well variously estimated at from 3,000 to 5,000 bbls. No. 1 Lago was spudded on May 27, 1925, as a diamond drill test. After much difficulty the 4¾-inch casing was set at 2,731 feet. The well was then held idle until a rotary rig was set up and drilling resumed. Tar sands were encountered at 2,510 feet and persisted to about 3,000 feet. From this point many shows of both oil and gas were met, and small doubt was entertained that a well of some kind would be discovered. The importance of this discovery can not be overestimated. A new field is opened, adjoining properties of the Creole, the V. O. C. and the Venezuela Petroleum, and immediately available production is at hand. The Gulf company is building rig for a test to be called No. 1 Unity. The location is about 4 miles south of the La Rosa Field on a small lake parcel, a triangular piece of some 18 hectares lying between the Creole parcels of Erie and Huron.

Among Standard Oil of California operations El Mamon is drilling at 2,417 feet. Neogil is drilling at 4,090 feet. No. 2 La Novedad is completed for geological information at 981 feet and another location. No. 3 La Novedad, 500 meters north of No. 1 La Novedad, will be spudded in a few days. No. 2 Lance is drilling at 624 feet. Neopig location is still having transportation trouble. The camp is 30 per cent and rig 15 per cent completed.

Of Standard Oil of Venezuela operations No. 2 La Danta cemented 8-inch casing at 2,608 feet. Bisantote is pulling 6-inch. Agua Dulce is abandoned at 2,010 feet. Pebiy, the scene of the Indian attack, is still fishing at 2,865 feet. No. 2 Monte Claro is running 8-inch casing at 932 feet. A new location at Veara-vaca, 20 kilometers west of El Mene, is drilling at 195 feet. A show of oil and gas was reported at 190 feet.

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# OIL PRODUCING AND REFINING COMPANIES IN SOUTH AMERICA

By Charles E. Kern

*Washington Bureau, The Oil and Gas Journal*

WASHINGTON, D. C., June 14 —Many oil interests are focusing their attention on the large producing and refining companies operating in South America. Activity in the South American oil fields has been so pronounced during the past year or two that a recent effort was made by the Department of Commerce to make as complete a survey as possible of these interests, almost wholly located in Colombia, Venezuela, Peru, Ecuador, and Argentina.

The very latest information concerning the production during the month of April 1926, amounted to 2,950,436 bbls. This rate being maintained throughout the year without any increase will show nearly 36,000,000 bbls. or something less than 5 per cent of the production in the United States. However, as there is a constant increase in this production it is believed it will show for the year 1926 a total amounting to considerably more than this monthly average.

Still more interesting, as a later development than is oil production in South America, is the information gathered in this manner in respect to petroleum refineries.

The following data is made up of very recent reports concerning both oil production and refining in South America.

**Oil Producing Companies.**

Colombia—

Tropical Oil Company, Barranca Bermeja, Colombia—Affiliated with Standard Oil Company of New Jersey through International Petroleum Company and Imperial Oil Co. of Canada.

Venezuela—

Carribean Petroleum Co., 65 Broadway, New York City (Royal Dutch-Shell).

Venezuelan Oil Concessions, Ltd., St. Helens Court, Great St. Helens, London, E. C. 2, (Royal Dutch-Shell.)

Lago Petroleum Corporation, 25 Broadway, New York City. Affiliated with Standard Oil Company of Indiana through Pan American Petroleum and Transport Co., 120 Broadway, New York.

South American Gulf Oil Co., Frick Annex Building, Pittsburgh. This company also has production on leases of the Creole Syndicate, this production being reported as "Gulf-Creole."

British Controlled Oilfields, Ltd., 120 St. James Street, Montreal, Canada.

Standard Oil Company of Venezuela (Standard of New Jersey). Not yet reported as having any large commercial production, but understood to have some output.

Latest reported production in Venezuela is for April, 1926, as follows:

| Company— | Barrels |
|---|---|
| Venezuelan Oil Concessions | 1,012,500 |
| Caribbean Petroleum Company | 655,000 |
| Lago Petroleum Corporation | 529,700 |
| South American Gulf Oil Co. | 302,000 |
| Gulf Creole | 240,000 |
| British Con. Oilfields, Ltd. | 214,236 |
| Total | 2,953,436 |

Ecuador—

Anglo-Ecuadorian Oilfields, Ltd., Guayquil, Ecuador, 145 Dashwood House, Old Broad Street, London, E. C. 2. This company has most of the production in Ecuador. There are a few other small producers chiefly from hand wells.

Argentina—

The Government ("Fiscal") Petroleum Department has most of the Argentine production, on the government Reserves at Comodoro Rivadavia and Plaza Huincul. Among the private companies, probably the principal producer is the "Astra" Cia Argentina de Petroleo, S. A., 25 de Mayo, 195 Buesnos Aires.

The Anglo-Persian Oil Company, through its subsidiary, the Cia Comercial y Industrial de Petroleo; the Standard Oil S. A. Arbentina (Standard of New Jersey); the Cia Ferro-Carrilera de Petroleo (British); the Cia Petroleo de Challaco; and possibly one or two other companies, have reported some production.

The above list includes only the companies actually producing oil. There are other companies of course, especially in Venezuela and Colombia, which are drilling or carrying on various activities.

**Refineries In South America.**

Colombia—

Refinery at Barranca Bermeja, owned and operated by Tropical Oil Co. Reported to have handled something over 500,000 barrels of crude in 1925. Capacity stated to be about 2,500 barrels per day.

Venezuela—

Lago Petroleum Co. Topping plant at Salinas, Venezuela.

Caribbean Petroleum Co. (Royal Dutch) Refinery at San Lorenzo. Latest report on capacity about 100,000 tons annually, but being enlarged.

Lago Petroleum Corporation, also reported to be constructing refinery at Aruba Curacao Petroleum Industry Co. Large plant at Willemstad, Curacao, operating on Venezuelan oil. Capacity 10,000 tons daily.

One or two small plants for use of individual companies only. Other refining facilities proposed.

Peru—

Principal refinery is owned and operated by International Petroleum Co., Ltd. at Talara. This plant handles the company's own production and also that of the Lobitos Oilfields, Ltd.

F. Piaggio & Co. have a small refinery at Zorritos.

Ecuador—

The Anglo-Ecuadorian Oilfields Ltd. has a small but modern plant at Santa Elena. There are also one or two other very small local plants.

Argentina—

There are five fairly large oil refineries operating in Argentina, other than the the National refinery at La Plata, and these are noted below together with the capacity, location, products, and affiliations of each.

| Company—Location of Refinery—Products Elaborated | (1) | (2) |
|---|---|---|
| National Refinery, La Plata, gasoline, kerosene and fuel oil (Arg. Government) | 2,000 | 50,000 |
| West India Oil Co., Campana, Gasoline, kerosene, fuel oil and lubricants (Standard Oil) | 500 | 12,000 |
| Cia. Astra, Campana, gasoline, kerosene, fuel oil and lubricants (Argentina) | 60 | 1,300 |
| Cia. Condor, Avellaneda, gasoline, kerosene, fuel oil and lubricants (Argentina) | 55 | 1,250 |
| Cia. Ferrocarrilera, Comodoro Rivadavia, gasoline and fuel oil. (British Ry. with American machinery and equipment.) | 50 | .... |
| Refineria Fregueiro, Avellaneda, gasoline, kerosene and fuel oil | 50 | 140 |

References: (1) Daily capacity consumption of crude oil in metric tons; (2) actual consumption during recent months in metric tons.

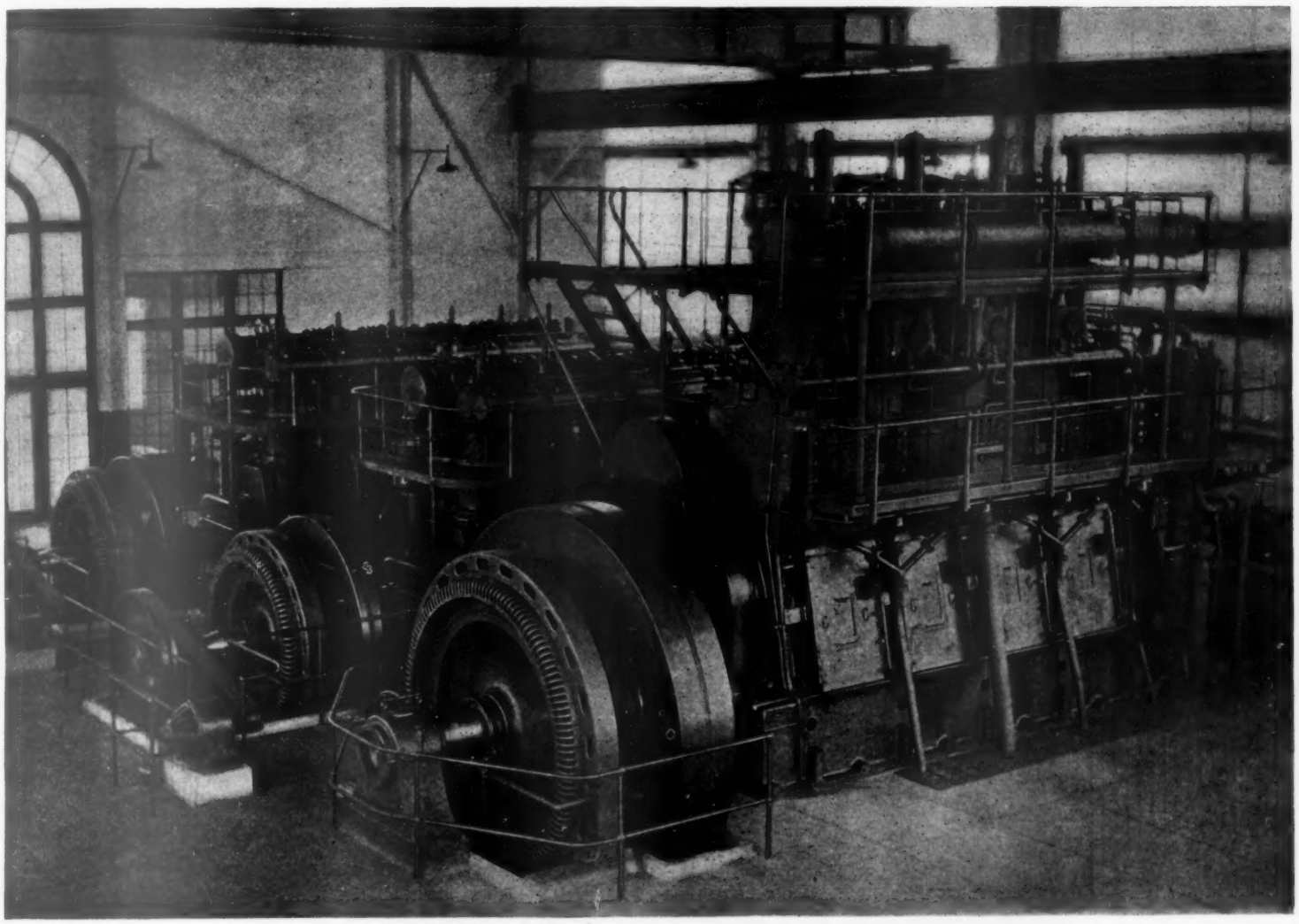
Peru—

International Petroleum Co., Ltd., Talara, Peru. Affiliated Standard Oil Co. (N. J.) through Imperial Oil Co. of Canada. Produces about 80 per cent of Peru's total.

Lobitos Oilfields, Ltd., Lima, Peru, Dashwood House, Old Broad Street, London, E. C. 2.

F. Piaggio & Co., (Establecimiento Industrial de Petroleo de Zorritos) Zorritos, Peru (Local concern).

The National or Government Refinery has installed two Cross cracking units which began operations on March 26, 1926. This refinery, constructed and now operated by the Bethlehem Steel Co., willl be turned over to the Argentine Government on or before October 15, of this year. The fuel oil will continue to be marketed by the petroleum division as at present, while the other products will be distributed by private oil companies now operating in this country.



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In contrast, a steam plant that provides for additional main units must be burdened with auxiliary equipment, building space, extra stack capacity, etc., far in excess of immediate needs and with an investment that must remain partly dormant perhaps for years. Later, if remodeling must be considered, the old outfit as a whole may not be well suited to the new conditions. The rapid development of and improvement in new types of steam units place a further handicap on older types, so that the inferior efficiency of the old outfit plus the additional fixed charge imposed by rearranging may prove more costly in a short time than an out-and-out new installation.

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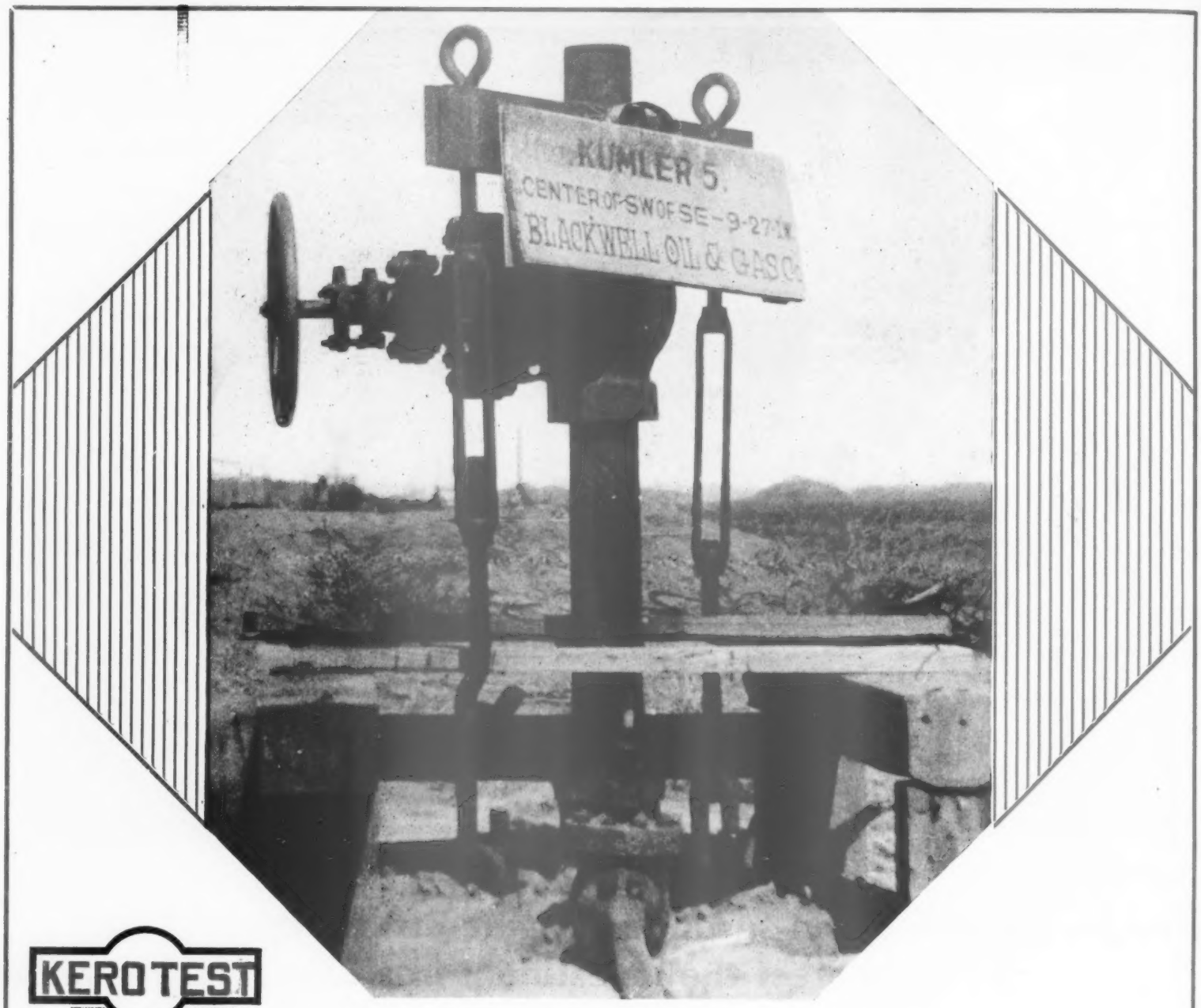


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## EXTENSIVE FIELD FOR PETROLEUM RESEARCH

(Continued from Page 37)

had thorough confidence that there was great value to be had in men who search and think. One of the elements that had assisted him in his own career was his dependence upon chemists to solve the problems relating to refining and especially to lubrication.

### Experience at Lima

One instance of his wisdom in this respect, was shown in his early career, as the dominant force in the Standard Oil Co. Oil had been discovered in Ohio, known as the Lima Field, but it contained sulphur in such large quantities that it was useless. Pennsylvania oil, the first discovered, and strangely enough the most valuable of all petroleum that has been brought to the surface, was practically free from sulphur. Now most of the oil produced brings a sulphur problem to the refiner but the Standard's solution of the Lima condition, with the subsequent improvements, was really the foundation of the treating methods widely used today.

When Pennsylvania crude was selling for $4 a barrel, the Lima oil was sold at a few cents a barrel and shipped to Chicago for boiler fuel, but it could not be used for that purpose nor for any other, and the pric of even a few cents a barrel proved no attraction.

It was just at this time that Mr. Rockefeller astonished his board of directors, by advocating and obtaining an appropriation of $100,000, a large amount of money at that time, to purchase leases in the Lima Field. His expert to whom that duty was given, returned and reported that he had not expended the money. Pressed for a reason, he stated he had not the heart to waste the company's money in that way. The head of the oil industry was not influenced by this statement nor did he condemn the man who made it. All he did was to induce the board of directors to double the appropriation, making it $200,000. The expert was sent back and with that fund a vast area of the Lima Field went into the hands of the Standard Oil.

Coincident with this action was activity in the laboratories of several scientists devoted to research, for some practical method to refine the Lima oil so that the sulphur might be removed by commercial operations. This was successful, and today no one knows whether he is buying products made from an oil once highly impregnated with sulphur or not.

### Results of Research

This kind of work might well be undertaken by private enterprise for a business purpose for profit alone. Most of the large oil companies are today supporting laboratories devoted to investigation of problems the solution of which will result in immediate profits. The antiknock fuel and cracking processes are the most outstanding of this class of commercial investigation. The great influence of a broadening in the installation of cracking processes is revealed in a study of the average recovery of gasoline. This was 30.9 per cent in 1923, increased to 33.1 per cent in 1924, and to 34.9 per cent in 1925. This is an increase of 4 per cent in two years. However, the latest reports obtainable, show that the recovery for April, 1926, was 38.4 per cent, equivalent to 3.5 per cent over the average for 1925, and evidencing a greater progress almost equal to that of the previous two years.

Dr. B. T. Brooks declares that a saving of more than $150,000,000 annually can be accomplished if fractionation by the best modern equipment is applied to the whole industry.

President James F. Norris, of the American Chemical Society, speaks of the petroleum business as a $9,000,000,000 industry and says that little is known of the chemistry of these millions of barrels of liquid fuel. In hundreds of research laboratories there are men imbued with scientfic curiosity and who ask only to be grubstaked to go forth and blaze new trails.

Petroleum products are no exception to the general rule that the value of products of simple and widely understood manufacturing processes follows very closely the market value of the bulk materials.

Under these conditions and barring illegal trade understandings to uphold prices, the obvious formula for economic success is enormous refinery throughput.

It becomes all the more necessary, therefore, for refineries to install processes and equipment which will widen their normally small margin of profit.

### Government Bureaus

The thought that today animates the scientific men of the country is that class of research which relates to fundamentals. It is difficult to translate this fundamental knowledge into a statement showing financial results. Some of their problems depart from pure fundamental operations and enter the field of commercial research, but the latter class is almost always conducted for the benefit of some industry which pays the cost and care is taken to avoid pure research that may just as well be done in other laboratories. The scientific bureaus at Washington realize that private enterprise is sensitive in respect to any encroachment upon their activities by a Government bureau.

This very attitude of the petroleum industry may explain why it has failed to use the brains and equipment of the Federal departments, and especially the Bureau of Mines and the Bureau of Standards to the extent that it might. The scientists of the Government are especially well educated and as a rule have had superior training. They look upon their work from very much the same angle as many college and university professors do. Repeating the thought of Doctor Norris—all they ask for is a problem of fundamental importance, the more basic it is the better, to be supplied with adequate facilities with which to conduct their labors, and to be left alone. They are seldom concerned with the length of the working day and the hourly pay.

At the present time approximately only 1 per cent of the appropriations of Congress are devoted to scientific work of a research character in all the Government agancies in Washington and elsewhere. This relates to all classes of scientific research, including agriculture, geology, standardization and special problems that are solved for the benefit of every class of industry. Petroleum is only a small element in this calculation. The refining branch of the industry is deeply grateful to the Bureau of Mines for the contributions of Rittman, Dutton and Dean, which have had a marked influence in the advancement of our knowledge of the art of cracking. The Rittman process while not of commercial value at this time, nevertheless has proven to be of primary importance in the art. The cracking of petroleum products has progressed to such an extent that it has reduced materially the quantity of illuminating oil. lubricating oil and fuel oil which ordinarily accumulated from the refining of a barrel of petroleum and oversupplied the market. This process has enhanced the values of these products.

### Hoover's Attitude

Secretary Hoover has accepted the chairmanship of the board of trustees of the National Academy of Science (National Research Council), which is to control the research funds of the Academy and in discussing the vital need for greater financial support of pure research said:

"While we have in recent years developed our industrial research upon a scale hitherto unparralleled in history, we have by no means kept pace in the development of research in pure science. The sudden growth of industrial research laboratories has in itself endangered pure science research by drafting the personnel of pure science into their ranks. Thus applied science itself will dry up unless we maintain the sources of pure science. We must add to knowledge, both for the intellectual and spiritual satisfaction that comes from widening the range of human understanding, and for the direct practical utilization of these fundamental discoveries. A special study in an industrial laboratory, resulting in the improvement of some machine or process, is a great value to the world. But the discovery of a law of nature, applicable in thousands of instances and forming a permanent and ever available addition to knowledge, is a far greater advance."

Elihu Root is no less emphatic than Herbert Hoover in his appreciation of fundamental scientific research. He says:

"Every practical advantage gained in utilizing natural forces for the benefit of mankind can be traced back to a necessary basis established through fundamental research in pure science by men who had no other object than to ascertain the truth. If that kind of research ends progress in applied science must presently also end. Fundamental research requires systematic support because it does not present the manifest promise of immediate profits."

### Mellon Institute

The Mellon Institute, as reported in the thirteenth annual report of the director, has expended $3,719,904 during the 14 years of its existence for the support of the research work conducted under its Industrial Fellowship System. This work has been supported through donations by individuals and firms, usually for the investigation of a specific problem or for research work to be confined to a stipulated field. During the last year the institute operated 54 fellowships and employed 94 research chemists and engineers. The money expended last year amounted to $527,551. Of the 54 fellowships or problems there were three related to the petroleum industry. The results include 8 bulletins, 30 research reports and 56 other scientific and technical papers published during the calendar year 1925 by the institutional membership; 24 United States patents were also issued to industrial fellowship incumbents. The total contributions to literature for the 14 years ended January 1, 1926, have been as follows: Twelve books, 44 bulletins, 370 research reports, 565 other articles, and 286 United States patents.

The organization for research should not be difficult. Research is nothing more than is involved in asking a question and answering it. Everyone, man and animal, is engaged in it. That dog with the bone in his mouth upon looking down into the water, did not meet the other dog with the bone he saw there, but he lost the bone. He found out something, and it is not related that he was not the wiser for his act. Research is finding a fact or adding something to what is known, that is adding to the sum of human knowledge. Someone has said that it is the attitude of mind which has to do with the success of a piece of research work. One cannot with safety jump from the third story of his building; he says it cannot be done. However in the presence of fire and at the command of the fireman, he does jump and lands in the blanket or the fire-net unharmed.

### Qualifications of Director

There should always be a directing board or a committee, the members of which have an appreciation and conception of the character of the projects submitted for authorization. There should be a director who has had the education and experience which will enable him to outline the projects, estimate their cost and the time that may be required to accomplish the desired result or to reach a conclusion. And it may be remarked here, that a negative result is often worth the cost of finding it; the idea will not be looked into again. Work of this kind should not have to be repeated, it should be so well done that there can be no questioning the answer.

The director should be permitted to choose his assistants without outside influence, and he in turn should be willing to assume full responsibility for the results. The men should have adequate salaries so as to be free from worry and to be permitted to indulge in what should be considered the ordinary pleasures of life; these may include membership in the auto club, the golf club, or other lines of sport and pleasure which help the normal fellow to grow and be happy.

### Research Yields Big Return

Extensive research is expensive although the returns have in most cases justified the expenditure. Numerous examples may be cited but one will do.

Several years ago the Bureau of Standards was requested to test automobile brake linings as a guide for the purchase of this material by the Quartermaster Corps of the Army. No standard test procedure existed but one was developed and among numerous brake linings each of which was claimed by its vendor "the best," the wear factor varied as 20 to 1. But the manufacturers who were open minded enough to go after that which was actually the best, rather than the best in the language of the salesmen, improved their product and it is now estimated that the quality of brake linings is on an average seven times as serviceable as it was when this investigation was begun. It is estimated that this means an annual saving of at least $25,000,000 in cost of material and $15,000,000 in installation. This says nothing of the matter of convenience and the avoidance of accident incident to superior material.

In addition to the centralized form of organization is that which has been found to be satisfactory to a number of different firms, wherein the projects are submitted to university research men who are especially well qualified in the particular subject involved. This plan has considerable merit, because many universities have excellent laboratories supplied with modern apparatus which it would be unwise to attempt to duplicate in some industrial laboratories.

### Research Laboratory

Director Weidlein, of the Mellon Institute of Industrial Research has said that an industrial research laboratory is often an experiment and hence it is usually prudent to start in a small way and gradually build on acquired experience. Everp plant laboratory must justify itself and develop into an essential industrial service bureau. Work should generally begin in a simple and relatively inexpensive building, planned so as to permit of easy extension as the activities require and as the appropriation allows.

The scope of the research, like several other features, should be determined as time goes on. At the outset there will be several problems awaiting investigation that will supply plenty of work for the small group of scientists. Gradually it will become the habit for various department heads to pass problems over to the laboratory director. Every company that establishes a research laboratory should be educated in the value of and need for more and more scientific investigation. Therefore, a good motto for an industrial research director is, "Make our laboratory necessary." All who have benefited by the results of scientific research should feel it a duty to do something for the acquisition of additional knowledge.

Industrial history makes it clear that happy ideas and chance discoveries have not contributed materially to the progress of technology. The stimulus for development generally results from demand, and in manufacturers organized on modern lines the working out of new processes and the improvement of existing processes consist mainly in the application of scientific fact and theory, the raw material of the applied scientist and engineer. Industry, therefore, should sustain pure as well as technical, not merely for altruistic reasons, but because pure science research makes for progress in technology. The successful director of industrial research is a Janus with two faces, one of which receives the impressions from technology, whil the other is sions from technology, while the other is science.

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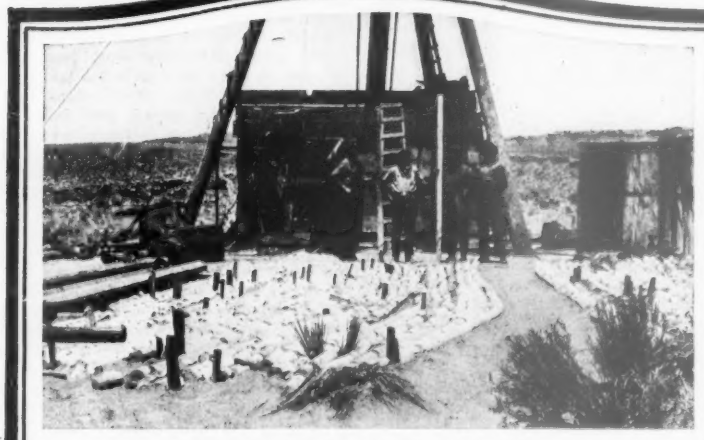


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## NORTH CENTRAL TEXAS

(Continued from Page 48)

also good for 40 bbls. at 3,201-08 feet. Swensondale Oil Co.'s No. 1 Echols "B" was a 5-bbl. well at 3,200 feet, after plugging back from 4,365 feet. Provident Oil Co.'s No. 1 Nolan was a failure at 4,086 feet and was abandoned.

Gulf Production Co.'s No. 3 B. F. Satterwhite pumped 45 bbls. at 3,406 feet in black lime. There was 40,000 feet of gas with the oil. The same company's No. 3 J. M. Ward "D" pumped 48 bbls. in 18 hours from black lime at 4,101 feet, total depth.

**Eastland County**

Moorman and others' No. 1 Ross was dry and abandoned at 3,505 feet.

**Callahan County**

The Prairie Oil & Gas Co.'s No. 8 McDonough, made 175 bbls. from sand at 1,399-1,414 feet.

**Coleman County**

De Arman Brothers' No. 1 Garrett and others was dry and abandoned at 1,586 feet.

**Brown County**

Barkley & Conway's No. 11 Dunn, Section 12, Juan Delgado Survey, made 40 bbls. from sand at 1,143-63 feet Douglas and others' No. 1 Graham estate was dry and abandoned at 1,870 feet. Gholson's No. 1 Williams, E. Pruitt Survey, was a 10-bbl. pumper at 1,116-26 feet. Gilman & McMurray's No. 5 Thompson, in the W. B. Smith Survey, made 80 bbls. at 1,196-1,214 feet. Hughes Development Co.'s No. 11 Arledge, Section 150, Block 4, N. B. Mitchell Survey, was dry and abandoned at 1,330 feet, having found the regular pay at 1,286-1,305 feet dry. Humble Oil & Refining Co.'s No. 1 W. W. Allen, in Block 8, of the Juan Delgado Survey, was a failure at 1,160 feet and abandoned. The same company's No. 3 Hodnett, Section 789 J. H. Harris Survey, made 30 bbls. at 1,151-61 feet, total depth 1,163 feet. No. 1 E. P. & W. H. Kilgore "B", in the NE cor. Section 3, Juan Delgado Survey, produced 600 bbls. at 1,149-59 feet. McCarter and others' No. 2 Leatherwood, NE cor. of their tract in Section 11, Juan Delgado Survey, was good for 30 bbls. at 1,121-47 feet.

Midwest Exploration Co.'s No. 3 Suttles, Section 140, Robert Mitchell Survey, was a 100-bbl. producer at 1,152-63 feet. O'Brien & Quinn's No. 1 Gaines in the W. B. Travis Survey, was dry and abandoned at 1,350 feet. Phillips Petroleum Co.'s No. 1 Dunn, Section 12 Juan Delgado Survey, made 75 bbls. at 1,143-47 feet. The same company's No. 2 Prather, Section 145 William L. Swain Survey, was a 60-bbl. producer at 1,290-1,305 feet. The Prairie Oil & Gas Co.'s No. 1 Trammel, in Section 2 F. D. Stewart Survey, was flowing by heads at the rate of 300 bbls. daily from sand at 1,324 feet. Root's No. 3 Suttles, in Section 140, Robert Mitchell Survey, made 40 bbls. at 1,121-39 feet. T. B. Slick's No. 3 Starr, Section 161, Block 3, G. White Survey, was dry and abandoned at 2,964 feet. The Texas Company's No. 13 Dunn, Section 12 Juan Delgado Survey, made 75 bbls. at 1,142-62 feet and No. 14 Dunn, in the same section, made 20 bbls. at 1,139-57 feet. West and the H-Y Oil Co.'s No. 4 Newton, Section 141 Robert Mitchell Survey, was a failure and plugged at 1,198 feet. Williamson and others' No. 3 Newton, in the same section, was good for 60 bbls. at 1,214-33 feet.

Janellen Oil Co.'s No. 1 Davis was dry and abandoned at 1,600 feet.

**Reagan County**

Big Lake Oil Co.'s No. 2-B University pumped 149 bbls. from sand at 2,466 feet. Texon Oil & Land Co.'s No. 44 University, Group 1, was good for 245 bbls. on the pump from sand at 2,943 feet and No. 45 pumped 164 bbls. at 2,972 feet.

Zoch and the Marland Oil Co.'s No. 1 J. A. Talley, in Section 5 G. C. & S. F. Survey, was abandoned as dry at 3,212 feet.

**Upton County**

Dixie Oil Co.'s No. 1 fee, a core drill test, reached the top of the salt at 599 feet. The same concern's No. 1 E. S. Hughes, in the William Teel Survey, pumped 44 bbls. from sand at 2,067-93 feet. The Marland Oil Co. and Choate & Henshaw's No. 1 Noelke & Murphy, Section 20, Block BB12, G. C. & S. F. Survey, was dry and abandoned at 3,218 feet.

**Crockett County**

Cromwell and others' No. 3 Powell was good for 160 bbls. at 2,654-69 feet. Humble Oil & Refining Co.'s No. 4 Powell made 119 bbls. of oil and 56 bbls. of water at 2,647-54 feet.

**First Reports Outside of Panhandle**

**Wichita County**

Culbertson Co.'s No. 39 J. L. & J. T. Waggoner, 2,450 feet south of the north line and 850 feet east of the west line of their lease, in Section 13 B. S. & F. Survey; No. 40, 2,650 feet south of the north line and 1,350 feet east of the west line of their lease, same section, drilling at 1,000 feet with rotary. F. P. Cullum and others' No. 1 Kemp & Kell, 150 feet south and west NE cor. E half NW, Section 6, S. P. R. R. Survey A-1,294, rig. Humble Oil & Refining Co.'s No. 6 H. B. Hines, 1,450 feet north and 1,170 feet west of SE cor. of west 200 acres of east 268 acres of H. B. Hines tract, Section 11, H. & G. N. Survey, location. John O'Neil's No. 24 Rio Bravo, 835 feet north and 200 feet east of SW cor. E half SW, Section 31, Block 5, H. & T. C. Survey, location. John O'Neil and others' No. 1 G. L. Woodward, 150 feet north and east of SW cor. of north 729 acres Section 325, Waggoner Colony lands, location.

**Wilbarger County**

Barkley & Meadows' No. 13 W. H. Stephens "A", 500 feet north and 150 feet west of SE cor. S half NW NE, Section 83, Block 14, H. & T. C. Survey, location. Humble Oil & Refining Co.'s No. 3 W. T. Waggoner "N", 150 feet north and 830 feet west of SE cor. NE SW, Section 46, Block 4, H. & T. C. Survey; No. 4 W. T. Waggoner "N", 200 feet north and 150 feet west of SE cor. NE SW, Section 46; No. 2 W. T. Waggoner "M", 150 feet north and 450 feet west of SE cor. their 40-acre "M" lease, Section 42, Block 4; No. 12 W. T. Waggoner "M", 473 feet north and 150 feet west of SE cor. same lease. Magnolia Petroleum Co.'s No. 54 F. A. Summer, 1,450 feet north and 1,500 feet west of SE cor. Section 17, Block 13, H. & T. C. Survey. Milham Corp.'s No. 12 W. T. Waggoner "L", 755 feet south and 155 feet east of NW cor. their 35-acre lease in Section 42, Block 4. Phillips Petroleum Co.'s No. 13 W. T. Waggoner "A", 220 feet north and 660 feet east of SW cor. NE NE, Section 44, Block 4; No. 14 W. T. Waggoner "A", 660 feet north and 220 feet east of SW cor. NE NE, Section 44; No. 3 W. T. Waggoner "T", 660 feet north and 220 feet east of SW cor. NW NW, same section; No. 9 Waggoner "QQ", 150 feet south and 200 feet east of NW cor. their 80-acre lease, Section 47, Block 4. Prairie Oil & Gas Co.'s No. 4 W. T. Waggoner "A", 290 feet north and 150 feet west of SE cor. S half NE, Section 45, Block 4; No. 5, 150 feet north and 590 feet west of SE cor. N half SE, Section 45; No. 3 Waggoner "B", 150 feet south and west of NE cor. SW, Section 43 Block 4.

**Drilling Operations**

**Archer County**

The Allday Oil Co.'s No. 2 B. G. Hasson, 150 feet south and 750 feet west of NE cor. of east 42 acres of north 50 acres of B. G. Hasson's 152-acre tract, Robert Carson survey No. 165, rigging up rotary. R. L. Carter's No. 1 W. R. Brown, 150 feet north and west of SW cor. Lot 13, Section 97, A. T. N. C. L. survey, rig. L. T. Burns' No. 1 L. F. Wilson-McCrory, Tr. "E", 150 feet south and west NE cor. SW, Lot 3, Section 67, A. T. N. C. L. survey, rigging up rotary.

The Atlantic Oil Producing Co. and Holmes' No. 1 W. H. Thomas, 150 feet south and west NE cor. of north 20 acres, Lot 4, south subdivision of Nathan Thomas survey, A-454, location. The Barnsdall Oil Corp.'s No. 3 A. J. Lowe, 150 feet north and 810 feet west of SE

cor. east 105 acres of Section 2,402, T. E. & L. survey, drilling at 800 feet. Cook & Reeder's No. 1 W. T. Browning & Co., 150 feet south and east of NW cor. of east 53 acres of south 106 acres of west 313 acres, Section 2, S. P. R. R. Survey, A-1,253. Continental Oil Co.'s No. 6 J. F. Rogers "A", 150 feet north and 750 feet west of SE cor. of east 35 acres of south 60 acres of west 120 acres of north half, Section 2,407, T. E. & L. Survey. The Cosden-Consolidated Oil Co.'s No. 1 C. C. Conner, 150 feet north and west of SE cor. Section 109, Club Ranch subdivision.

Head & Heydrick's No. 1 H. F. Harmel, 1,170 feet south and 1,470 feet west of NE cor. south half, Section 2,490, T. E. & L. Survey. Humble Oil & Refining Co.'s No. 11 G. B. Hamilton, 450 feet south and 150 feet east of NE cor. I. C. Little's 159-acre tract and located in lot 1, Crawford subdivision of L. Holman Survey, drilling at 800 feet. Jesse Lincoln's No. 1 S. Wilson, 150 feet north and east of SW cor. NE 10 acres of SW 40 acres (square) in the G. C. Wiseman Survey, A-671. Lewis Oil Corp.'s No. 2 H. O. Prideaux, 150 feet south and 1,050 feet east of NW cor. of west 200 acres of H. O. Prideaux's 894 acres in A. Rohus Survey, A-240.

Litchfield and others' No. 1 J. T. Richardson 150 feet north and west SE cor. lot 6, J. Scott Survey, A-374. Maer & Staniforth's No. 4 G. P. Mead estate, 1,050 feet north and west of SE cor. section 40, G. P. Meade subdivision of "LM" pasture. Marland Oil Co.'s No. 1 W. H. Thomas, 150 feet north and 450 feet west of SE cor, of north 50 acres lot 5, north subdivision, spudding. No. 2 Thomas, SE cor. of same 50 acres, rig up. Pandem Oil Corp.'s No. 1 L. L. Hudson, 150 feet south and east of NW cor. east 40 acres of west 80 acres of north 93 acres, Section 80, J. W. Harris Club Ranch subdivision, rigging up rotary. The Pandem Oil Corp. and Simms Oil Co.'s No. 14 Pandem Oil Corp. and others, 450 feet south and 150 feet east of NW cor. west 40 acres of south 100 acres, Section 2,433, T. E. & L. Survey, drilling at 1,400 feet. Petroleum Prod. Co.'s No. 3 L. J. Kunkel, 750 feet north and 150 feet west of SE cor. of west 25 acres of south 50 acres lot 2, Thos. McCoy Survey, A-269, drilling at 440 feet. Phillips Petroleum Co.'s No. 2 G. P. Meade estate, 150 feet south and west NE cor. of west 80 acres of north 160 acres, Section 35, G. P. Meade subdivision of "LM" pasture. Texhoma Oil & Refining Co.'s No. 1 W. J. Logan 1,195 feet north and 1,822 feet west of SE cor. Allison Arms Survey, A-5.

**Clay County**

E. M. Pones' No. 1 J. G. Mullens, 1,394 feet north and 783 feet east of SW cor. of west 80 acres, Section 2,604, T. E. & L. Survey, A-463, spudded 20 feet with machine. Lone Star Gas Co.'s No. 29 R. M. Waggoner, 200 feet north and 800 feet east of SW cor. Section 59, Bacon subdivision of W. Weddington Survey, A-988, rig.

**Montague County**

Humble Oil & Refining Co.'s No. 8 R. Hinds, 473 feet south and 150 feet east of NW cor. its 40-acre lease in J. J. Wall Survey, A-1,199. Pure Oil Co.'s No. 4 J. W. Maddox "A", 250 feet south and 700 feet east of NW cor. their 47-acre "A" lease in S. H. Arnold Survey, A-5; No. 2 J. B. Oldham and others, 150 feet south and west of NE cor. 20-acre lease John Chambliss Survey, A-123, timbers on the ground. Rycade Oil Corp.'s No. 1 R. W. Cunningham, 150 feet south and east of SE cor. of Gulf Prod. Co.'s 61-acre lease in J. N. Hodges Survey, and located in G. Bayne Survey, A-15, rig. Texhoma Oil & Refining Co.'s No. 1 E. J. Bouldin "A", 495 feet north and 150 feet west of SE cor. of east 80 acres E. J. Bouldin 200 acres in John Chambliss Survey, A-123, rigging up rotary; No. 1 R. W. Cunningham, 150 feet south and east of NW cor. west 40 acres of east 194 acres of R. W. Cunningham's 318 acres in G. Bayne Survey, A-15, timbers; No. 7 Robert Hinds, 450 feet north and 150 feet west of SE cor. its 40 acres in J. J. Wall Survey A-1,199, rigging up rotary; No. 8 R. Hinds, 1,027 feet north and 150 feet east of SW cor. their 40-acre lease in J. J. Wall Survey, A-1,199, drilling at 235 feet.

**Jack County**

Guthrie and others' No. 1 Mrs. M. D Snedeker, 150 feet south and west of NE cor. west 40 acres (lot 7) of south 80 acres of north 332 acres of M. D. Snedeker's 415-acre tract in J. Robbins Survey, A-490, rigging up rotary. Howard and others' No. 1 G. P. Stewart, in the center of Section 3,301, T. E. & L. Survey, spudding. S. E. Oldham and others' No. 1 William Hanna, 339 feet south and 1,699 feet west of NE cor. Section 3,313, T. E. & L. Survey, rigging up machine. Pandem Oil Corp.'s No. 1 L. S. Wright, 150 feet south and west of NE cor. SW of Z. S. Brooks Survey, A-64. Staley & Wynne's No. 1 Mrs. M. D. Snedeker (lot 8), 150 feet south and east of NW cor. east 40 acres (lot 8) of south 80 acres of north 332 acres of M. D. Snedeker's 415 acres in J. Robbins Survey, A-490. Winnipeg Oil Co.'s No. 1 J. D. Gillespie, 150 feet south and east of SW cor. John Chambliss Survey and located in J. B. McNeil Survey, A-1,796.

**Young County**

Bridwell & Heydrick's No. 6 A. Beardon, 750 feet south and 482 feet west of NE cor. south 51 acres of east 91 acres A. Beardon tract and located in S. G. Hardaway Survey, A-136; No. 7 A. Beardon, 780 feet west and 750 feet south of NE cor. south 51 acres, same tract; No. 1 R. E. Rogers, SE cor. of west 20 acres of east 60 acres of north 100 acres, Section 166, T. E. & L. Survey, drilling at 650 feet; No. 9 H. B. Street, 1,520 feet south and 1,270 feet west of NE cor. Section 2,444, T. E. & L. Survey. The Texhoma Oil & Refining Co. and Burton's No. 1 S. M. J. Benson, 150 feet south and east of NW cor. of east 33 acres of west 66 acres of south half Section 1,450, T. E. & L. Survey. Douglas and others' No. 1 H. O & E. R. Prideaux, 250 feet south and 150 feet east of NW cor. Section 15, Young County School Land, A-1,284, moving in spudder. Golding & Cochran's No. 1 H. H. Tucker, 150 feet north and 450 feet west of SE cor. south 40 acres of east 109 acres of west 134 acres, Section 167, T. E. & L. Survey, rigging up rotary. Jeffers & Jeffers' No. 1 Mrs. Charles Ferguson, 150 feet north and 450 feet east of SW cor. NE 40 acres (square) of Mrs. Charles Ferguson's 320 acres in S. Tynes Survey A-274. C. B. Long and others' No. 2-A H. C. McCaughren, 150 feet north and east of SW cor. of north 25 acres of west 50 acres of H. C. McCaughern's 78 acres in Section 1,367, T. E. & L. Survey, drilling at 200 feet. Ray & Massie's No. 1 Mrs. C. Williams, 1,050 feet north and 150 feet east of SW cor. M. Rhodes Survey, A-1,523. Reed and others' No. 2 J. W. Jack, 150 feet south and 450 feet east of NW cor. Section 23, Young County School Land A-1,284. Sun Oil Co.'s No. 3 Otto Deitrich, 750 feet south and 450 feet east of NW cor. Section 23, Young County School Land A-1,284. The same company's No. 3 Otto Deitrich, 750 feet south and 150 feet east of NW cor. south 114 acres of Otto Deitrich's 145 acres in the NE of Section 4, B. B. B. & C. Survey A-1,700. The Texas Company's No. 10 A. Beardon, 4,047 feet south and 1,200 feet west of NE cor. J. A. Hopkins Survey A-2,086, and located in S. G. Hardaway Survey, A-136.

Wolf and others' No. 1 E. F. Farrow, 450 feet north and 330 feet west of SE cor. E half NW, Section 1,369, T. E. & L. Survey, drilling at 900 feet. No. 1 W. M. Ward, 484 feet south and 1,050 feet east of NW cor. W. M. Ward 130-acre tract in L. W. Ross Survey, A-1,352.

**Shackelford County**

Engle Bros.' No. 3 J. B. Matthews, 752 feet south and 464 feet east of NW cor. SW NW, Section 29, Blk. 10, E. T. R. R. Survey, drilling at 250 feet. Independent Oil & Gas Co.'s No. 1 Davis, 150 feet south and west of NE cor east half, Section 13, Block 12, T. P. R. R. Survey, rig. Milham Corp.'s No. 1 F. W. Alexander, 2,500 feet SE of NW line and 750 feet SW of NE line, Section 579, T. E. & L. Survey, drilling at 430 feet. Same company's No. 3 Z. W. Casey, 150 feet NW of SE line and 450 feet SW of NE line Section 581, T. E. & L. Survey, moving in material. M. H. Overlees' No. 2 E. M. Stephens, 1,233 feet SE of NW line and 1,233 feet SW of NE line Section 584, T. E. & L. Survey, rigging up.

Roeser & Pendleton and Marland Oil Co.'s No. 7 Cook A-85, 150 feet north and west of SE cor. SW NE, Section 85, Blk. 10, E. T. R. R. Survey, rig; No. 8 Cook A-85, 150 feet south and 500 feet west NE cor. NE NW, same section, location; No. 9 Cook A-85, 500 feet south and 150 feet west of NE cor. SW NE, same section, drilling at 400 feet; No. 10 Cook A-85, 850 feet south and 150 feet west of NE cor. SW NE, same section, location. Roeser & Pendleton's No. 4 Cook B-85, 150 feet north and east of SW cor. SE NE, Section 85, rig up; No. 5 Cook B-85, 500 feet south and 150 feet east of NW cor. SE NE, same section, drilling at 300 feet; No. 6 Cook B-85, 500 feet north and 150 feet east of SW cor. SE NE, same section, location.

Tannehill Oil Co.'s No. 16 R. J. Moberly, 500 feet south and west NE cor. SW NE, Section 11, Blk. 11, T. P. R. R. Survey, rigging up.

**Throckmorton County**

J. G. Adams and others' No. 1 D. McKeichen, 150 feet south and west of SW cor. D. T. Yates Survey and located in the D. McKeichen Survey, A-1,301.

**Hood County**

E. V. Parsons and others' No. 1 C. A. Cook, 1,000 feet south and 600 feet east of NW cor. James Cole Survey, fishing tools at 1,800 feet.

**Eastland County**

Mid-Kansas Oil & Gas Co.'s No. 1 Farmers State Bank, 250 feet south and 330 feet east of NW cor. their 115-acre tract in W. DeMoss Survey. Texas Pacific Coal & Oil Co.'s No. 27 J. E. Butler, 1,000 feet south and 2,550 feet west NE cor. of J. E. Butler's 990 acres in John York Survey. World Oil Corp.'s No. 1 Ben Cove, 250 feet north and east of SW cor. 90-acre tract, A. Winfree Survey.

**Callahan County**

Canyon Oil & Gas Co.'s No. 4 D. H. Derrington, 150 feet north and east of SW cor. of west 17 acres of Derrington's 37.5 acres, W. G. Anderson Survey. Flannigan and others' No. 1 J. A. Miller, 150 feet north and 950 feet east of SW cor. Section 49, Comal County School Lands.

**Coleman County**

Jewell & Sill's No. 1 W. A. Smith, 1,470 feet south and 940 feet east of NW corner Section 24, H. T. & B. Survey. Zweifel and others' No. 1 Mrs. M. C. Dibrell, 200 feet south and west of NE cor. NW SW, Section 11, H. T. & B. Survey, moving in rig. S. C. Canary and others' No. 1 W. A. Ellis, 3,300 feet south and 2,150 feet west of NE cor. Pleasant Young Survey No. 494 and located in W. A. Ellis' 320 acres, being the east 320 acres of Upton Henderson's 1,090 acres. Jewell & Sill's No. 1 Wm. Pfluger, 4,620 feet north and 3,300 feet east of SW cor. Wm. Skurlock Survey No. 280.

**Brown County**

J. S. Cosden's No. 3 Elmo Williams, 700 feet north and 200 feet east of SW cor. A. May Survey A-1,288; No. 3 Elmo Williams "A", 200 feet north and 825 feet west of most southerly SE cor. of R. L. Coffelt Survey, A-1,688, machine; No. 9 Elmo Williams "A", 600 feet north and 701 feet west of most southerly SE cor. same survey. Brown and Co.'s No. 2 J. G. Gaines, 750 feet south and 150 feet west of NE cor. west half J. G. Gaines 80-acre tract in William L. Swain Survey No. 145, spudding. Humble Oil & Refining Co.'s No. 3 J. H. Allen, 200 feet south and east of NW cor. of north 73 acres of Section 7, Juan Delgado Survey No. 785; No. 1 J. M. Hughes, 200 feet north and east of SW cor. J. M. Hughes, 200 feet north and east of SW cor. J. M. Hughes' 264-acre tract in Heirs of William English Survey, No. 791, drilling at 700 feet. Humble's No. 2 J. C. Kilgore "B", 200 feet south and 660 feet west of NE cor. west 76 acres Section 3, Juan Delgado Survey No. 785; No. 3 J. C. Kilgore "", 585 feet north and 200 feet east of SW cor. same 76 acres; No. 2 E. P. & W. H. Kilgore "B", 200 feet north and west SE cor. Section 2, same survey, spudding; No. 3-A Leatherwood, 455 feet south and 150 feet west NE cor. Section 11, Juan Delgado Survey No. 785.

Midwest Exploration Co.'s No. 6 M J. Suttles, 730 feet south and 2,567 feet west of NE cor. R. Mitchell Survey No. 140, being 730 feet south and 150 feet west of most northerly NE cor. its 400-acre lease, drilling at 175 feet; No. 7 M. J. Suttles, 200 feet south and 3,467 feet west of NE cor. of same survey, being 200 feet south and 1,018 feet west of same NE cor.

Rhodes & Higher's No. 11 W. A. Prather, 150 feet south and 1,350 feet east of NW cor. their 62-acre lease in William B. Travis Survey No. 148. C. M. Root and others' No. 4 M. J. Suttles, 1,650 feet south and 1,967 feet west of NE cor R. Mitchell Survey No. 140, being 150 feet north and 450 feet east of SW cor. their 50-acre lease. Williamson and others' No. 4 H. A. Newton, 620 feet south and 160 feet west of NE cor. H. A. Newton's 206 acre tract in R. Mitchell Survey No. 141; No. 5 H. A. Newton, 1,400 feet south and 160 feet west of NE cor. same tract, machine. C. O. Moore's No. 1 D. A. Beal, 150 feet south and west of NE cor. Section 11, H. T. & B. Survey, drilling at 400 feet

**Upton County**

Humble Oil & Refining Co.'s No. 1 J. T. McElroy, 330 feet south and east of NW cor. SW, Section 30, Blk. 42, Tp. 5-S, T. & P. R. R. Survey. Roxana Petroleum Corp.'s No. 1 B. H. Estes, 160 feet north and 330 feet east of SW cor. Section 18, Blk. 3, M. K. & T. R. R. Survey. Sun Oil Co.'s No. 2 A. S. Burleson, 330 feet south of north line and same distance NE of SW line its 160-acre tract in Thomas C. Jones Survey No. 100, A-746.

**Crockett County.**

Marland Oil Co. and Wallace's No. 1 J. S. Pierce, C SE of Section 150, Blk. O, G. H. & S. A. R. R. Survey.

**First Reports Outside of the Panhandle.**

**June 4**

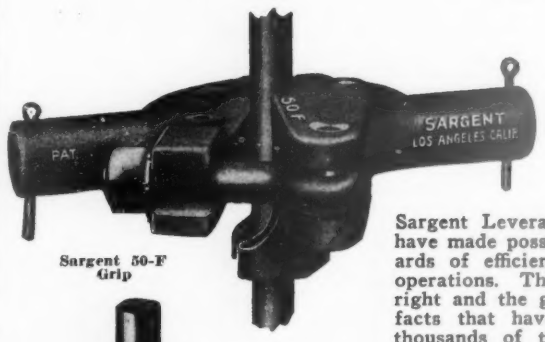
**Wichita County**

Humble Oil & Refining Co.'s No. 1 L. F. Potter, 750 feet north and 150 feet west of SE cor. of east 67 acres, L. F. Potter 170.5 acres, Section 6, Specht Colony subdivision, drilling at 250 feet; No. 3 J. E. Roller, 438 feet south and 150 feet west of NE cor. Roller tract, J. Rector Survey A-247, drilling at 100 feet. Panhandle Refining Co.'s No. 1 W. H. Chilson (Section 19), 150 feet north and west SE cor. NW, Section 19, League 4, Denton County school land, a location. E. J. Stump & Co.'s No. 1 W. H. Chilson (Section 6), 150 feet north and 750 feet east SW cor. Section 6, League 4, Denton County school land, a location. Bullington, Lee & Pendleton's No. 2 Grace Jennings "B", 1,275 feet south and 916 feet east of NW cor. Section 8, H. T. & B. Survey A-475, drilling at 200 feet with rotary. Dale Oil Corp.'s No. 24 Grace Jennings, 450 feet south and 175 feet east of NW cor. Section 12, H. T. & B. Survey A-473, a location. Magnolia Petroleum Co.'s No. 11 Douglas-McDonald, 150 feet north on CSL of their 26-acre lease in Section 11, H. T. & B. Survey A-136, a location; No. 18 Sarah Pratt "A", 1,710 feet south and 1,170 feet west of NE cor. Sarah Pratt 160 acres, and located in Section 1, H. T. & B. Survey A-124, drilling at 300 feet. Petroleum Investment Co.'s No. 19 J. A. Fisher, 150 feet north and east of SW cor. Lot 6, and located in Section 7, H. T. & B. Survey A-134, a location.

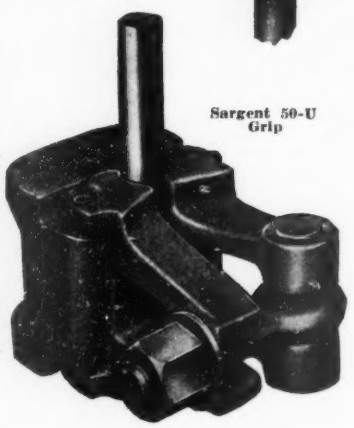
(Continued on Page 174)

XUM

# Sargent Grips




Sargent 50-F Grip



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## SOUTHWEST TEXAS

(Continued from Page 62)

in and drilling at 500 feet on block 14, 610 feet from the south and 150 from the east line. Houston Gulf Gas Co.'s No. 1 Bruni, in block 12 in the southwest corner has rigged up. Duke Phillips in the northeast corner of the south half of block 46 of the Bruni tracts got a dry hole and has abandoned the test at 1,987 feet.

The test seems to indicate that the trend of production is swinging to the east at that point. The well is three-quarters of a mile south and a quarter of a mile east of the Ball well on block 45 that extended the field a mile south. George Echols has spudded in on block 69, two miles east of production in the field and on the south tier of blocks of the Bruni tracts. Stroube & Stroube of Corsicana have the derrick up for a test in the northwest corner of block 19, which will be a south offset to the Houston Gulf Gas test in the southwest corner of block 12 which is rigged up. Stroube & Stroube also have a derrick up for a test in the southwest corner of block 78 of the Edgington subdivision of the Puig Bros. ranch and another derrick up in the northeast corner of the same block. This is the farthest east that anyone has started to drill in the Edgington tracts and the test in the southwest corner of block 78 is directly north of the Houston Gulf Gas in the southwest corner of 12 Bruni and Stroube & Stroube in the northwest corner of 19 Bruni. Ramsey-Maxey Oil Co. is making location for a test on the west half of block 42. Staley & Wynne are ready to drill in their No. 4 in the northeast corner of the west half of block 18, offsetting a well of Ruthada Oil Company on the east half of that block, also No. 5 in the southeast corner of the same tract and No. 6 in the southwest corner of block 13. They have derricks up for two other tests on 13 and one on 18. Ruthada Oil Company has the derrick up for the No. 2 Bruni in the northwest corner of the east half of block 18.

Three Rivers Oil Company's No. 6 Puig completed last week, swabbed 800 barrels the first 24 hours. It is on the south line of the Puig Bros. ranch and offsets the Gibson Oil Corp.'s lease in block 13 of the Bruni tracts. Three Rivers is building derricks for Nos. 7 and 8, located at 300 foot intervals east of No. 6 and on block 77 of the Edgington tracts of the Puig ranch. Edgington-Niles have a derrick up on block 65 of the Puig ranch, the location being in the southwest corner and nearest production. If it makes a well it will extend the proven area. Gibson Oil Corporation has completed its No. 1, swabbing 400 to 600 barrels a day. No. 2 came in the week before, swabbing a little more. No. 3 has set casing and should be brought in this week. No. 4 has spudded in and No. 5 has rigged up. Trussel & Cezeau have a derrick up for their No. 1 Bruni in the northeast corner of block 39, two miles to the east of production and in the center of the Bruni tracts, measuring north and south.

Laredo Oil Company has a sand at 1,645 in its No. 11 Killam on survey 457. Mirando City is located on part of the survey. Layne and others' No. 1 Lopez in survey 309 south of the Bruni tracts is in hard rock at 1,945 feet. It is a wildcat test. Gleason and others have abandoned at 2,010 feet their No. 2 Benavides on block 12 of survey 9. O. W. Killam is rigged up on survey 309 for a test for Ramsland and others

**Carolina-Texas District.**

O'Hearn & Putnam, drilling contractors have spudded in for Houston Gulf Gas Company, a test on block 9, survey 268 in the Carolina-Texas field and are drilling at 1,400 feet. Associated's No. 3 Webster is a location on survey 684, located 450 feet from the west line and 1,110 from the north line. Associated's No. 2 Webster is drilling at 2,050 feet on the same survey. Daniels & Best are moving on a rig for a test on survey 684, located 1,470 feet from the west and 150 from the north line. J. H. Winch has completed his No. 1 de la Garza in block 12 of survey 336 of the Carolina-Texas field at 2,082 feet, making 15,000,000 feet of dry gas.

**Webb Wildcats**

Burns and Maone are drilling at 1,000 feet in No. 1 Coe on Survey 51 southwest of the Carolina-Texas gas field. O. W. Killam is drilling at 2,070 feet in No. 1 Driver in Survey 52, next east of Survey 51. Lane-Texas Co.'s No. 1 Townsite well at Laredo has completed reaming down to 1,723 feet and has set 10-inch casing and is now drilling at 1,760 feet. W. C. Ritchison's No. 1 A. S. Billings, in Block 1 of Survey 71, several miles northeast of the Carolina-Texas Field, is drilling at 2,110 feet.

**Cole Field**

In the Webb County side of the Cole gas field the Cole Petroleum Co.'s No. 23 Benavides on Block 9 of Section 8 is standing at 2,200 feet. No. 10-A, one of three deep tests, is drilling at 1,700 feet. It is located on Block 5 of Section 3. No. 9-A Benavides on Block 7 of Survey 753 is rigging up.

**Duval County**

In the Duval County side of the Cole Field Cin-Tex Petroleum Co. has completed its No. 7 Benavides, in Block 16 of Section 10, 150 feet from the southwest and northwest lines, at a total depth of 1,780 feet. It is due northwest of the discovery well one location. George M. Ball's No. 1 Roach, 2 miles or more to the east of the field, and a wildcat test, is standing at 1,220 feet. Cole Petroleum Co. is down over 1,000 feet in No. 25 in Block 1 of Section 18, which is one of three deep tests now being drilled by the Cole Petroleum Co. Houston Oil Co.'s No. 3 on Block 16 of Section 10, which proved a failure at the producing horizon of the discovery well, is being deepened and it is now at 2,283 feet. Depth of the discovery well is 1,781 feet. Houston's No. 4 is standing at 1,994 feet. Barkley & Meadows and William F. Morgan's No. 3 on Block 4 of Section 10, a mile north of oil production, has set casing at the same horizon as Nos. 1 and 2, each of which were gassers at 1,743 feet and 1,739 feet respectively. No. 3 is expected to make a gas well also. O. W. Killam completed No. 7 Benavides, on Block 1 of Section 10, which was bailed and made an estimated 40,000,000 feet of gas.

Killam & Slocum completed their No. 1 Benavides, on Block 4 of Section 15, at the south end of the proven gas area, at 1,673 feet, estimated at 50,000,000 feet of gas.

**Piedras Pintas Field**

In the Piedras Pintas Field in Duval County Humble Oil & Refining Co.'s No. 6 Walsh, one location west of the discovery well, is drilling at 782 feet. Humble's No. 7, located 500 feet north of the discovery well, has the location cleared of brush. Magnolia's No. 1 Speer, one-half mile northwest, is standing at 3,492 feet. Humble's No. 8 Singer is drilling at 400 feet. Simms company's No. 1 Schallert is drilling at 3,260 feet.

**Duval Wildcat Tests**

Most important among the wildcat tests of Duval County is the Simms Oil Co.'s No. 1 Dinn, SE NE, Survey 666, about the center of the survey. It has casing set at 1,746 feet and with every indication that when drilled in it will make a gas well. It is 5 miles north of the center of the Cole Field. It was necessary to weight the mud down with iron oxide while finishing the well. Completion of a big gas well at that point, with the nearest gas or oil production in the Cole Field 5 miles south, will start a new center of wildcatting.

Humble Oil & Refining Co.'s No. 1 Dowdy fee, in the northern part of Duval County, which had a showing of oil at 1,457 feet, had 108 feet of sand. It is drilling now at 1,605 feet. Murchison & Fain's No. 1 Peters, which had a fishing job at 250 feet, skidded the derrick and started a new hole and is drilling at 150 feet. Benedum & Trees interests' No. 1 Southerland is drilling at 1,600 feet in the western central part of the

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county. Maurer & Duggan are drilling at 3,158 feet. J. T. Graham's No. 1 Beall, in northeastern Duval County, is standing at 2,500 feet. Morgan Oil Corp. is preparing to spud in on Block 29 of Section 1 of the Mesquite ranch, several miles north of the Cole Field. The test is all rigged up.

**Atascosa County**

Plateau Oil Co. is moving in tools to drill a test 2½ miles west of Anchorage, in Atascosa County. The derrick is already up. Witherspoon Oil Co. is assembling rigs to drill the first of three tests on the Turpe tract in northwestern corner of Atascosa and about 1 mile south of the west end of the Somerset Field.

**Bastrop County**

Cranfill & Reynolds' second test on the Hendrix farm, near Cedar Creek in Bastrop County, is near the chalk. The first test was an Edwards lime test and was dry. The second is to test out shallow production. Amerada Oil Corp. is moving in tools to drill a wildcat test in the Cedar Creek territory of Bastrop County. L. J. Dodwell has temporarily abandoned his location for the second test east of Elgin in Bastrop County. Mahone & Wilford have abandoned No. 1 Dunk, east of Elgin, at 2,009 feet. It had a little show of oil at around 1,600 feet, but nothing more. They are moving the rig to the Ramsey farm, a little to the south, and will start another deep test in probably 10 days.

**Bee County**

Benedum & Trees' No. 1 Goree, in northwestern Bee County, is drilling at 3,100 feet.

**Bexar County**

Marland Oil Co. tested dry in its No. 1 Mihalski, in eastern Bexar County, 1 mile north of St. Hedwig, and is drilling deeper. Total depth of the hole was 1,719 feet. When the well was bailed it developed a little sulphur water. The 8¼-inch casing was set at 1,658 feet and the top of the Edwards was 1,638 feet. It is expected the Edwards lime at that point will not be over 450 feet thick and the Glenrose probably 1,000 feet. The hole is being reamed out to 7⅞ inch and is nearly on bottom. It will be deepened and will test the Glenrose for production and possibly also the Trinity if the Glenrose is not too thick. Utah Texas at about 2,850 feet is about 50 feet into the Edwards lime in its No. 1 Ivan Vick, in the southern part of the county, and making slow progress due to hard formation. It is the next Edwards lime test on which interest is centering in this territory. W. L. McClanahan's No. 2 Sodrok, in eastern Bexar County, 2 or 3 miles south of the Marland test, is to be deepened to the Edwards lime. It tested at 1,405 feet, taking in several sands from 557 feet down, but failed to make more than a small well. Liner has been pulled and the hole is drilling deeper. Tidal Oil Co.'s No. 1 Cantu, 1 mile south of Adkins and about 3 miles south of the Marland test, is drilling below 1,500 feet. It was endeavoring to pick up shallow production found at around 1,426 feet in the test of the Good Oil Co., drilled on the same farm. Humble Oil & Refining Co.'s No. 1 Yturri, drilling at around 1,100 feet, had a little showing of heavy oil in the top of the Austin chalk. Storey & Stieren's No. 1 Cover, a little to the east of the Humble, shut down to drill a water well, which is completed, and will resume drilling today at 1,406 feet.

**Brooks County**

Benedum & Trees are shut down at 3,500 feet waiting for orders in No. 1 Wormser, in northwestern Brooks County. Ballard & Underwood's No. 1 Lassiter, in northeastern Brooks County, are drilling at about 400 feet in a salt dome test.

**Brewster County**

Green Valley Oil Corp.'s No. 2 Wilson, in western Brewster County, has resumed drilling at 2,115 feet. The well will be deepened and if it fails to pick up production will be shot at 1,740 feet, the depth at which No .1 Wilson drilled a couple of years ago, got considerable production before the casing collapsed.

**Gonzales County**

Martin Oil & Development Co. spudded in last week on the Preston farm in the W. W. Pace one-third league in Gonzales County and is down a few hundred feet.

**Karnes County**

Earl B. Reynolds will spud in the first of this week in his No. 2 Butler, in Karnes County, about 1,000 feet south of his first test. Derrick was up and rig moving in last week.

**Live Oak County**

George B. Pickett at 1,150 feet in his No. 3 George West is in hard caprock over the Fayette formation. Mid-Kansas Oil & Gas Co. is resurveying its lease block at Fant City before starting a test, there being about 300 acres overrun in the tract.

**Medina County**

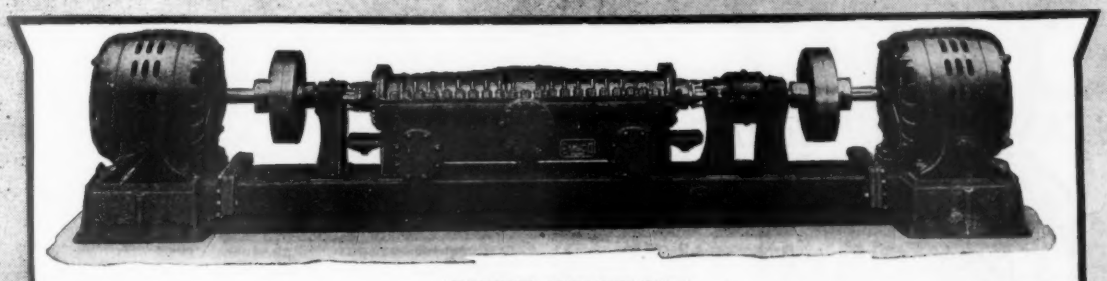
Golden West Oil Co. has completed its No. 5 Schmidt in the Ina Field, and the well is going on the pump at this time. No. 2 Schmidt of this company seems to be one of the best wells in the field at this time. It has pumped 25 bbls. daily for a period of 90 days without being cleaned out. The other wells are not doing so good. No. 5 looks like it would make a good well. Depth is a little below 900 feet. Arnett Oil Co. has completed its No. 3 Nixon, a little to the southwest of the Golden West, by shutting off the fine sand with a bootleg packer. The experiment is being watched with some interest by those studying the problem of the field. Golden West has made the location for No. 6 Schmidt, 300 feet west of No. 5, and in it will stop and test the showing in a 10-foot sand at 325 feet passed in the No. 5.

In the shallow field south of Hondo 4 miles, Golden West has abandoned both its No. 1 Odom and No. 2 Odom at 540 feet and the casing is being pulled. When they started to pull the casing in the No. 1 after it had been standing at a lesser depth there was several feet of oil in the hole. When the hole was cleaned out it tested dry and deepening failed to disclose any explanation for the presence of the oil in it. Al Buchanan is fishing at 346 feet in No. 1 Odom. Kittle & Townley abandoned at 1,000 feet No. 2 Richter. They have a derrick up and are starting to drill No. 1 Bendele in Survey 593.

North & South Oil Co. of Luling is rigging up for a deep test south of Hondo 4 miles and near the shallow production of Medina Oil Co.

Henderson & Holden completed No. 3 Adams in the territory 2 miles south of the Ina Field in Medina County and at approximately 900 feet it gauged 6,470,000 feet of dry gas. It is 1,600 feet north of No. 1, which gauged 9,000,000 feet, and the same distance north of No. 2, which gauged 13,000,000 feet. They are moving south of Nos. 1 and 2 for the location for No. 4 Adams.

Tarver & Sprague's (formerly reported as Eastham & Tarver) No. 1 Howard on Survey 91, 2 miles nearly due east of the Tarver & Sprague wells, at 1,100 feet, is reported to have cored a sand carrying considerable oil. They had casing set at 815 feet and below that set liner to make the test at a little below 1,100 feet. Alamo Drilling & Leasing Co. has spudded in No. 1 Louis Graff, 2 miles north of the Ina Field, and will drill to test for serpentine production. It has the derrick up for No. 1 Kennedy in western Medina County, 1 mile from the west line of Medina County and one-half mile south of the Sabinal road. It will be started as soon as the rig is released from the Graff test. Ina Oil Co. tested its No. 1 Hoffman at 828 feet in Survey 535, 8 miles south of Hondo, but failed to make anything but a small well. It is being drilled deeper, having been started originally with the idea of testing to the Edwards lime. The sand at 828 to 858 feet was a good coarse sand and all operators agreed a better sand than in the Ina Field. It failed to produce more than about 5 bbls. daily and it is believed the production may have been mudded off. The Ina test on the Finger tract farther west is drilling at around 400 feet. J. R. McCaldin's No. 1 W. A. Thomson is drilling at 1,550 feet. It is located west and a little south of Devine. Gibson Oil Corp. has abandoned No. 1 Faseler (Carpentier) at 1,340 feet. It is 5 miles



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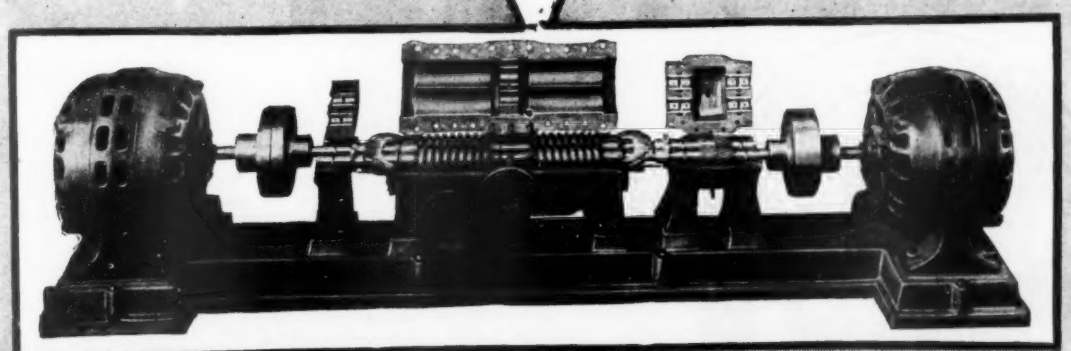

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southwest of the Ina Field. Golden West Oil Co. has spudded in No. 1 Joseph Courand, a little southwest of Castroville, in wildcat territory, and H. W. Ward has the derrick up and the tools moving in for a test northwest of Castroville.

**McMullen County**

T. C. Hadley has closed a contract to drill a deep test on the Franklin ranch in northwestern McMullen County. This will be the third test on that ranch. Houston Gulf Gas Co. has contracted to drill one well on a block adjoining the Sights block on the west and Poole and others on the Sights block are drilling at 1,950 feet with a show of gas on No. 1 Franklin and arranging to start a second test on the Dillworth tract adjoining. George M. Ball, on the Kuykendall ranch, farther west in the county, is drilling at about 400 feet, using cable tools.

**San Patricio County**

John Sigmund's No. 7 at Aransas Pass is drilling at 3,586 feet in blue gumbo and expecting to continue to at least 4,000 feet.

**Starr County**

Ramsey-Maxey Oil Co. is drilling at 150 feet in No. 1 Kelsey in Starr County. Dauchy & Pryant are preparing to resume drilling No. 1 Kelsey in Survey 125. Present depth is 1,943 feet. O. W. Killam's No. 1 Guerra in Survey 43 is drilling at 1,700 feet.

**Val Verde County**

General Petroleum Co. of California has bought a half interest in the Plateau Oil Co. test in eastern Val Verde County, 6 miles east of Del Rio. The well (No. 1 Harrison) is drilling at 1,935 feet. It has encountered very little water while drilling. Independent Operators' No. 1 Whitehead is drilling at 3,340 feet northeast of Del Rio, and the Haviline test over the line in Kinney County is drilling around 4,000 feet.

**Zapata County**

O. W. Killam is drilling at 1,200 feet on Survey 307 in Zapata County. Maurer & Duggan are drilling at 600 feet in No. 2 Cuellar in Survey 243. O'Hern & Putnam are preparing to move in tools for a 3,000-foot test for Benedum & Trees on Block 22 of the Villa Grant. Magnolia Petroleum Co. is rigging up for a test on the R. Cuellar tract in Survey 278. Rollin V. Hill is preparing to start a new hole on the Villa grant instead of deepening the present test from 1,761 feet. Cullinan & Clark, at 1,715 feet in No. 1 Hinnant, in Block 9 on Survey 10, are in a sand. The Texas Company's No. 2 Jennings is in a gray sand at 4,233 feet.

**Zavala County**

Continental Oil Co.'s No. 1 Pryor is in the bottom of the Edwards, presumably at a depth of 3,460 feet, in Zavala County and having plenty of sulphur water. The contract depth is 3,500 feet and it may not reach the Glenrose at that depth, which was the object of the test.

## GULF COAST FIELDS

(Continued from Page 58)

widespread now and every operator is familiar with it at least in theory.

None of the pools offers much of consequence this week. At Boling, the Gulf-Humble joint No. 10 Hawes, is a 400-bbl. high gravity well. No. 6 Hawes is deepening at 4,613 feet. No. 9 Hawes will make a pumper at 3,175 feet. The Vacuum Oil Co.'s No. 3 Hooper, which came in last week flowing 2,500 bbls., sanded and quit flowing. It is being cleared. No. 2 Hooper is pumping 50 bbls. at 3,175 feet. No. 1 Hooper is deepening at 4,632 feet, the deepest test in the pool.

**Orange Pool**

In the Orange Pool, the Gulf Production Co.'s No. 3 Hager fee, a workover, is good for 135 bbls. at 4,600 feet. The Ryeade Petroleum Co.'s No. 4-E State land in Cow Bayou, is another workover, pumping 10 bbls. at 4,600 feet. The Orange Petroleum Co.'s No. 12 Chesson will pump, and No. 1 Williams, a semi-wildcat, was abandoned at 4,800 feet. The Texhoma Oil Co.'s No. 14 Chesson will pump at 3,400 feet. The Kishi Development Co.'s No. 7 McGuire is bailing at 3,250 feet.

In the Hull Pool, the Empire Gas & Fuel Co.'s No. 19 Barngrover is heading 350 bbls. at 3,125 feet. Gulf Production Co.'s No. 17 Scarborough is heading 200 bbls. at 3,940 feet.

Two small shallow wells complete the Sour Lake Pool's contribution to the total output of the district for the week. The Barclay Oil Co.'s No. 3 Rogers, is a 6-bbl. pumper at 1,025 feet, and the Minor Oil Co.'s No. 67½ fee is making 4 bbls. at 910 feet.

Shallow sands and small at that, were also the rule at Batson. The Gulf Production Co.'s No. 60 Choate is pumping 6 bbls. at 850 feet and its No. 103 Wing is good for 8 bbls. at 410 feet. No. 38 Wing is pumping 25 bbls. of fluid, 30 per cent water, at 750 feet. All are workovers.

The Rio Bravo Oil Co.'s No. 4 Cotton, in the Saratoga Pool, is bailing at 1,550 feet. No. 5 Fountain is drilling below 4,400 feet. Paggi & Co.'s No. 43 Queen is drilling around 780 feet.

At Batson, the Paraffin Oil Co.'s No. 66 fee is drilling around 455 feet. The East Batson Oil Co.'s No. 13 State land is below 1,180 feet. The Kirby-Capitol Oil Co.'s No. 5 Hodges, in the deep sand section, is drilling around 2,900 feet. The Gulf Co.'s Nos. 61 Choate and 168 Wing, together with S. R. Buchanan's No. 88 Milhome are rigging to start drilling.

The Sun Oil Co.'s No. 8 Wright, in the Goose Creek Pool, is pumping 50 bbls. at 2,500 feet.

The Houston-Gulf Gas Co.'s No. 3 Gray, in the Markham Pool, is a gasser.

The second joint test of the Bennett Production Co.-Humphrey Corp., on the north side of the dome at Barber Hill, Chambers County, was drilled too deep into the sand, found around 2,200 feet. A core showed a richly saturated sand that gave indications of a good producer.

**South Louisiana**

In the Vinton Pool, Marrs McLean's No. 10 Gray is rated at 250 bbls. at 1,800 feet. The Edgerly Petroleum Co.'s No. 3 Vincent is pumping 15 bbls. at 3,200 feet. The Texas Company got salt water in No. 1-A Gray at 4,010 feet, after working it over.

In the Edgerly Pool, the Rex Oil Co.'s No. 2 Hunter is making 50 bbls. at 3,200 feet. The Gulf Refining Co.'s No. 31 Bright-Pen will pump at 3,200 feet.

In the Jennings (Evangeline) Pool, Gulf Refining Co.'s No. 22 Jennings-Clement is a 15-bbl. well at 1,800 feet. The Coastal Fuel Oil Co.'s No. 91 fee is a 25-bbl. pumper at 1,700 feet. The General Petroleum Co. got salt water in No. 1 Fontent at 2,850 feet.

**Drilling in the Pools**

In the Orange Pool, the Gulf Production Co.'s No. 2 Briggs-Moore and No. 4 Hager fee are deepening with a location made for No. 6 Winifree. No. 2 Peveto is drilling at 3,655 feet. No. 23 Hager is below 4,230 feet, and No. 11 Kishi-Lang is at 2,875 feet. The Humble Oil & Refining Co.'s No. 25-A Chesson is at 3,345 feet. Peer Oil Co.'s No. 1 Mecom is working over. Rycade Petroleum Corp.'s No. 4-B State land is drilling around 3,655 feet, and No. 5-B is sidetracking at 3,160 feet. Rex Petroleum Co.'s No. 4 Carbello is around 3,810 feet, and Brownie Babbittee Oil Co.'s No. 2 McLean is deepening at 5,414 feet, and No. 5 McLean at 4,165 feet. Texhoma Oil Co.'s No. 6 Chesson is sidetracking at 1,135 feet. No. 9 is idle at 4,400 feet, and No. 15 is around 3,765 feet. Supreme Oil Co. will deepen No. 1 Jackson.

It will be noted that a good percentage of the wells drilling are either being drilled deeper or worked over.

**Boling Pool**

In the Boling Pool, The Texas Company's No. 2 Floyd is drilling at 1,565 feet. No. 3 Floyd is rigging, and No. 8 Taylor is shut down. No. 9 Taylor is around 3,440 feet. Sun Oil Co.'s No. 1 Taylor is milling at 2,845 feet. A derrick is standing for No. 6. Sinclair Oil & Gas Co. has a derrick up for No. 6 Taylor. Humble-Gulf's joint No. 7 Hawes is drilling below 3,910 feet, and No. 12 is at 2,645 feet, with No. 13 around 3,-

(Continued on Page 156)

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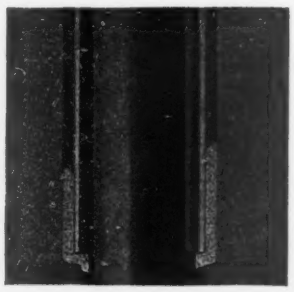

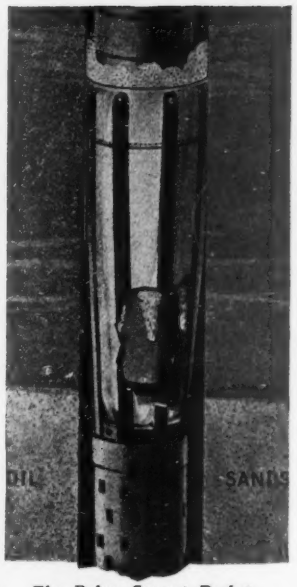


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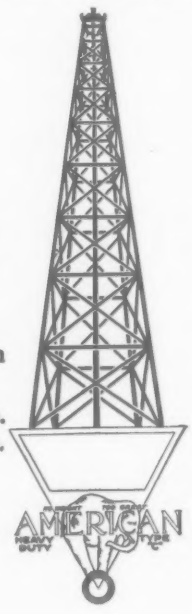


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## KENTUCKY-TENNESSEE

(Continued from Page 66)

of the Guenther-Gant farm, in the Swope Pool, has not cooled him a bit and that he will go on some other part of the lease and make another try.

**Barren County**

Rather light producers were the result of the drill in the Glasgow Field of Barren County, the most active section of the Kentucky Field and has been for the past year or more. In the Gorby Pool, southwest of Glasgow, R. A. Stohr's No. 3 on the Dearing farm is credited with a production of 10 bbls. J. W. Porter's No. 17 on the McGlochlin farm found a 3-bbl. pay in the Blue sand but failed to find any production in the Yellow Cap sand which was dry. The Hiland Oil & Gas Co.'s No. 17 on the Casady farm is a duster in the real producing sand. Lew J. Emery, Jr., Sons Co. is drilling No. 5 Jones farm. J. J. Sayer is cleaning out No. 2 on the Hatfield farm. Helper & Gorby are drilling No. 6 T. L. Gorby farm and Jacob Best, trustee, is drilling No. 6 Sanders farm.

In the Emery-Moore Pool T. L. Gorby and others' No. 5 on the W. E. Steffey farm is a duster, while No. 6, same farm, is drilling.

In the Hall-Baker Pool the Consolidated Gas Co. is drilling No. 10 on the J. H. Baker farm, and Harrington & Norris Brothers are drilling No. 12 R. E. Evans farm.

In the Knob Road Field, Ziegler Brothers' No. 4 C. D. Boyd farm produced 3 bbls. in the Blue sand, while their second test on the Boyd Brothers farm was a duster.

In the Lecta Pool the Esslinger Oil Co. is drilling No. 6 on the C. B. Jones farm, upon which the discovery well of the pool was found.

**Cumberland-Monroe Counties**

Along the Cumberland and Adair County line, in the Hopewell Field, Baird & Hickman's No. 1 Harden Hadley farm, on Sand Lick, failed to find any oil pay in either the first or second Sunnybrook sands, and drilling deeper, at last report being at a depth of 565 feet. Phillippi and others are shut down at No. 1 Patterson awaiting orders. Woods & Haslet are drilling around 200 feet at No. 1 H. Brockman. W. A. Hasser's test on the Elliott-Baker lease has been completed for a dry hole at 514 feet.

The test of the Elbow Oil Co. on the H. Cloyd farm, in the Judio Creek area, has been completed at a depth of 600 feet and dry.

Field Manager Stead, of the Alto Oil Co. operations, reports that his company will drill 10 wells just as fast as they can be done in the West Fork district.

In Williams Prong of the Sulphur Creek Field, Wilcox Brothers have a rig in for No. 4 on the J. A. Melton farm, but not drilling as yet, while the Oil Fork Development Co. is down around 250 feet at a test on the J. Finley farm in the same field.

**Other Developments**

In the Scottsville Field of Allen County Fred W. Owens' Nos. 14 and 15 are good for 2 and 3 bbls. respectively. Healy & Morris are drilling No. 1 Jim Lewis farm and F. J. Tapp is drilling No. 11 Ike Hill farm.

No completions were reported from the Bowling Green Field of Warren County, although Onsel Brothers and others' No. 13 on the Mary Ferguson farm is close to the deep sand pay. Brand & Henderson's No. 6 J. M. Morgan farm is in the sand and looks like a good well. The Derby Oil Co. is drilling its second test on the E. G. Savage farm, and Dr Cauble, attorney, is drilling No. 5 J. T. Vance farm.

**Tennessee**

The test drilled by Duncan and others on the Windle farm, in Overton County, Tennessee, is reported a dry hole by the owner, it being his second dry venture in that field.

In the Tinsley Bottom area of Clay-Jackson Counties, Dafoe and Son are drilling deeper their No. 5 on the Hamp Lynn farm. The drill was sent to a total depth of 1,151 feet, where it was given a shot with a very good showing. At 1,115 feet the Trenton sand was found and this may mean the rejuvenation of the pool that made such a fine showing in the past. This firm is drilling No. 3 on the Williams farm, and when visited a short time ago by a well-known oil scout had reached a depth of 295 feet.

W. W. Bentley and others are drilling No. 3 Bartlett farm, 7 miles south of the town of Granville, in Jackson County, at a depth of 250 feet. Nos. 1 and 2, same farm, were dry. If No. 3 proves a duster this firm contemplates the drilling of a test later in the vicinity of the hamlet of Algood, in Putnam County, where some producing wells were drilled some years ago.

Clark & Greer, of Birmingham, Ala., are drilling a wildcat on the Rippitole farm, 5 miles northeast of Cooksville, in Putnam County.

J. H. McClurkin and others are reported moving a rig for a test near Celina, in Clay County. H. Z. Clark is drilling No. 2 Thurman, in the Clark Pool, 3 miles out of Celina, in Clay County. Mr. Clark has about 3,000 bbls. of crude in storage on his leases and approximately all storage is filled and patiently awaiting pipeline connections, with prospects of the Paragon Development Co. extending its line from the Kettle Creek district to the property, a distance of approximately 7 miles. In the same pool, C F. Dickson has about 500 bbls. in storage.

## CENTRAL WEST

(Continued from Page 66)

farm, Section 15, same township, with a flush of 10 bbls., sand being topped at 1,285 feet and drilled 51 feet in the sand.

In the Findlay Field, in Eagle Township, Hancock County, Fuller and others' No. 20 in the southwest corner of the Jacob Felter farm, mapped as the Joseph Paller farm, Section 8, pumped 15 bbls. Sand was found at 1,320 feet, and total depth of well is 1,395 feet. In Grange Township, same county, the Ohio Oil Co., struck top of sand at 1,295 feet and drilled 100 feet in the sand at No. 12 on the A. E. Lugabill farm, mapped as the George W. Showalter farm, Section 4, and only found a 1-bbl. pumper.

The Ohio Oil Co.'s second well in the southwest corner of the James M. Nolan farm, in the Mendon Field, of Center Township, Mercer County, is a 25-bbl. flush producer at 80 feet in the sand, which was tapped at 1,132 feet, or a total depth of 1,212 feet. In the same section, N. E. Master's No. 4, 900 feet from the south line and 200 feet from the east line of the Charles Nolan farm, produced 8 bbls. Sand was struck at 1,143 feet and drilled 34 feet in the sand. The Oko Oil & Gas Co. is drilling No. 1 on the Joe Hileman farm, in the same area. The same company is drilling a second well on the Mathias farm, in Perrysburg Township, Wood County, in the Leidecker Pool, Section 29.

Everbeck & Roeder Brothers are drilling No. 5 on the Rupert lease, in Spencer Township, Allen County. C. A. Peavey and others are starting No. 5 on the S. H. Vore farm, Section 12, Bath Township, and Charles Geselchen and others are starting No. 6 on the William Looney farm, same township and county.

Work in the Roundhead Field of Hardin County will be stimulated greatly by installation of a pipeline in that territory by the Buckeye Pipe Line Co. Operators say this is one of the most important and most needed steps for development in the field and will result in increased activity there, since producers will get from 30 to 35 cents more for oil on the barrel than formerly, as freight charges will be eliminated. Among the chief companies operating there are the Roundhead Oil & Gas Co., New York Coal Co., Boston-Southwestern Oil & Gas Co., C. J. Neal & Co., and Sanford Ulrich and others, together with many individuals. Large blocks of land have been leased to the

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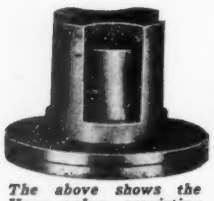

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south near Belle Center and across in Logan County.

**Indiana**

While several wells are drilling in the old Trenton Rock area of east central Indiana, no new completions were reported from there for the week. The only new well listed in the State was that of the Murphy Oil Co., in No. 4, in the northeast corner of the Stewart Brothers farm, in the southwest quarter of Section 13. Clay Township, Pike County, which is a 15-bbl. pumper. This well struck top of the sand at 969 feet and drilled 24 feet in where it was given an 80-quart shot. In Monroe Township, same county, the Murphy Oil Co. abandoned No. 2 Oliver Mason farm, Section 22, and No. 1 on the John Cooper farm, Section 23. Four strings of tools are working in Logan Township, same county.

Several wells are scheduled to start shortly in the Section 21 Pool, in Veale Township, Daviess County, where Sargent, Hartman and others drilled in some nice wells a few months ago.

Bell Brothers are scheduled for quite a number of wildcat wells in various parts of southwestern Indiana during the summer.

Northeast of Fort Wayne, in Maumee Township, Allen County, in the Ledford extension to the Payne Field, Estes, Manion and others are starting a test on the J. F. Butt farm, Section 9. This firm's well on the W. Kammyer farm, same section, is showing some oil and gas, but will be light.

**Illinois**

Drilling deeper of old producing shallow sand wells in the Casey-Westfield area of Clark County and the Siggins area of Cumberland County, northwest of Casey, may rejuvenate that once famous producing area. Since the Stray sand was found in the Martinsville Field of the same county and later oil was found in the Niagara limestone, over 100 feet deeper than the Stray sand, the idea persisted that the same formations can be found by deeper drilling in the old Casey Field proper, which is located to a great extent on Parker Prairie, in and around Oil Field and Westfield, and south just to the north of Casey. Parker and Casey Townships, and a possibility of finding the same sands in Johnson Township, same county, as well as in Union Township, Cumberland County, may bring forth a great drilling campaign. This was a wonder field back from 1906 to 1912. Deeper drilling will also be done in Lawrence County where the deepest known producing sand was the "McCloskey" where big wells were found around 1,800 feet deep. Deeper tests will be made in Crawford County, which lies between Clark and Lawrence Counties, and known as the Robinson Field.

In Section 1, Wabash Township, Wabash County, in the Allendale Field, the Max Oil Co.'s No. 7 on the Holson-Dorney lease, Section 18, is reported as making a nice showing. J. W. Whiteside and others abandoned their No. 2 on the Howard Armstrong farm, Section 24, and are now drilling No. 3, same farm.

An unusual situation has developed in connection with the wildcat well drilled some time ago by Henneberger, Utter and others on the Robert Liddle farm, in the northeast quarter of Section 26, Friendsville Township, Wabash County, approximately one-half mile south and close to 2 miles west of the Bass farm discovery well and about a mile directly south of the town of Friendsville, which was the latest well to be drilled in wildcat territory in Wabash County. Following drilling and shooting of the well some time ago it was put on the pump and pumped for 4 days, making a nice production. Then the pump was stopped and it has been standing idle for a week or so. Someone in the vicinity of the well heard a dripping noise and on investigation found that the oil was being forced up through the 2-inch tubing into the receiving tank nearby, without operation of the pump. The stream was not large, but it was steady and continuous. The owners have concluded to give the well a further pumping test in hopes of making a commercial producer of it.

In Dennison Township, Lawrence County, the Ohio Oil Co.'s No. 11, 350 feet from the north line and 800 feet from the west line of the Elidia J. Ridgley farm, Section 11, pumped 2 bbls. from the McClockey sand after given a 20-quart shot. Top of the sand was found at 1,833 feet and bottom at 1,838 feet, and drilled to a total depth of 1,840 feet. Same company's No. 5 on the J. W. Vandermark farm was dry at 1,852 feet, also in the McCloskey sand. Treat-Hays Co.'s test, 250 feet from the south line and 650 feet from the east line of the Thomas Taylor farm, in the southwest quarter of the same section, was shot with 100 quarts and pumped 3 bbls. McCloskey sand was struck at 1,813 feet and there was but 1 foot of the sand, the hole being drilled to a total depth of 2,045 feet. In the same township, the Hamilton Producing Co. abandoned Nos. 8 and 9 Joseph Gray farm, Section 3. In Petty Township, same county, the Ohio pulled out old No. 2 on the J. B. Smith No. 1 farm, Section 11.

**Central Ohio**

The week's report from the Central Ohio Field shows that 16 new wells have started drilling and 7 new locations staked for wells. There were 10 wells completed with a flush of 160 bbls., 4 dry holes and 3 gas wells, while in the offside area 3 wells were reported, with 2 bbls., and 2 dusters.

The Logan Gas Co. drilled in a very fair gas well at a test 620 feet from the south line and 350 feet from the west line of the Addison Stentz 50 acres, Lot 84, Sullivan Township, Ashland County. Same company made a location for a second test, 1,725 feet from the north line and in the center of the east and west line of the R. C. Fritzinger 89 acres, Section 3, Orange Township. The Wiser Oil Co. is starting No. 1 on the Sanitary Products Co.'s land in Greene Township, close to where a big gas well was recently completed by the Ohio Fuel Co.

In Medina County, Chatham Township, the Ohio Fuel Supply Co. drilled a dry hole in its No. 13, 750 feet from the south line and 1,350 feet from the east line of the E. T. and A. R. Clapp farm, Tract 17, Lot 5, at a depth of 445 feet. Harry Dempsey's second well, 450 feet from the south line and 800 feet from the west line of the Edward Goodyear farm, Tract 15, Lot 2, was also a duster at 460 feet. In Brunswick Township, the Ohio Fuel Gas Co. is drilling a test on the Delphia J. Hitchcock 55 acres, Lot 17. John Arthur has a location for a test in the southeast corner of the William A. McCabe 8 acres, Lot 11, Lafayette Township. The Logan Gas Co. is drilling a test 800 feet from the south line and 1,000 feet from the east line of the T. D. England 64 acres, Lot 25, Westfield Township, also its No. 9 on the Leland R. Seeley farm, in Lot 49, Litchfield Township.

In Brown Township, Knox County, the East Ohio Gas Co. made a location for No. 4 in the northeast corner of the Fred Kick 50 acres, Section 7, and for No. 11 in the northeast corner of the O. J. Beck 100 acres, Section 31. The Ohio Fuel Gas Co. also set a stake for No. 6, 660 feet from the north and east lines of the John H. Workman 79 acres, Section 4. In Jefferson Township, the Rocky River Oil Co. is drilling a second test 210 feet from the south line and 650 feet from the west line of the W. E. Tisserand 40 acres, Section 3.

The Logan Gas Co. is drilling a test near the southeast corner of the Jacob Landin 86 acres, Lot 75, Columbia Township, Lorain County, and the Ohio Fuel Gas Co. made a location for a test near the northeast corner of the Robert Squires 85 acres, Lot 14.

Glen Harmon and others' second test, 980 feet from the north line and 40 feet from the east line of the Clayton Good 44 acres, Section 36, Congress Township, Wayne County, that encountered a stray sand that showed a gas volume of 2,250,000 feet, and then concluded to go on into the Clinton sand, drilled into the

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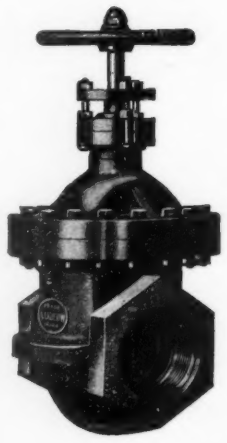

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Clinton and failed to find any signs of gas that was noticeable in that formation and will produce the well from the pay found in the stray. The Logan Gas Co. is drilling a wildcat near the northwest corner of the Lorena King 80 acres, Section 17, Baughman Township. The Ohio Oil Co. is drilling No. 4 on the James M. Carroll farm, Section 21, Wooster Township.

The Empire Gas & Fuel Co.'s second well on the Mary E. Bridges 100 acres, Section 6, Hardy Township, Holmes County, is rated at 65 bbls. The C. B. Bell Oil & Gas Co. struck a duster at a test on the C. B. Bell farm, in Monroe Township, same county. In the same township, the Arkansas Fuel Oil Co. is drilling No. 3 in the northeast corner of the William Miller 154 acres, Lot 11, and the Ohio Fuel Gas Co. made a location for its No. 1 in the southeast corner of the John R. Shankland 2 acres, which is off the Lucy Watts land, Lot 7. The Logan Gas Co. is drilling its test on the Levi Weaver 48 acres, Lot 5, Paint Township. In Kilbuck Township, the Ohio Oil Co.'s test, 660 feet from the south and west lines of the Albert Smith 40 acres, Lot 23, proved a duster.

In Athens County, Carthage Township, the Logan Gas Co.'s test on the J. B. and S. Ninngemeyer 156 acres, Lot 33, and in the northeast corner of the farm, was a dry hole in the second Cow Run sand at 738 feet. E. A. Sweeney and others are drilling a test in the northwest corner of the Marguerite Rowan 140 acres, Lot 6. In Waterloo Township, Guenther and others are drilling a second test on the Lafayette Hewitt 63 acres, Lot 38.

In Newcastle Township, Coshocton County, the Logan Gas Co. drilled a very light gas well at its test in the southwest corner of the C. B. and N. Ogle 317 acres, Lot 1, getting the gas at a shallow depth. Same company is drilling a test on the C. L. Shrimplin 30 acres, Lot 12, same township. W. H. Miller and others are drilling a test in the northwest corner of the Charles E. Moore 100 acres, Lot 8, Pike Township, same county.

G. H. Schrack and others are drilling a wildcat well 5 feet from the north line and 340 feet from the east line of the L. A. Keith 25 acres, mapped as the A. B. Crum farm, Section 19, Madison Township, Richland County. In the same township, the Mansfield Oil & Gas Co. is drilling a second test 685 feet from the north line and 90 feet from the east line of the Emil Schausee 60 acres, same section.

## MICHIGAN FIELDS

(Continued from Page 68)

tions in the Saginaw Field at once, drilling a well on the Mershon-Eddy-Parker Co. property, near the intersection of North Michigan Avenue and the Pere Marquette Railroad, representatives of the company announce. In announcing that drilling, tools are now being assembled in Ohio for shipment to Saginaw, they said more extensive operations here by their company are likely if the Saginaw Field develops favorably.

"'We have a considerable amount of acreage leased and if the field develops as we think it will, there will be plenty of operations before the summer is over,' said J. R. Whalen, who with W. H. Smith, both representatives of the company, are handling its local interests. The company is assembling a full equipment of tools for drilling, and they should be here within a short time. The company plans to use a drilling machine and start drilling within a short time.

"The company's first well will be in the vicinity of the principal oil development here though slightly to the eastward of any well that has produced oil so far. It is within about a mile of all of the producing wells, the closest being the Saginaw Prospecting Co.'s No. 4, which is about three-eighths of a mile to the southwest.

"Mr. Smith has been in the Saginaw Field since the early days of the oil discovery last summer, while Mr. Whalen and other representatives of the concern have spent considerable time here."

**Leasing Activities**

The woods around Saginaw are full of leasers and oil scouts and the register of deeds, Miss Elizabeth B. Hesse, is kept busy recording them.

John J. Klise, of the central Ohio contracting firm of Klise-Eckstein-McCann Co., of Wooster, Ohio, has been on the jump in the Saginaw area for a short period, in which he secured leases on a total of 2,167 acres, comprising 27 leases, the majority of which are on the west side of the Saginaw River in James, Saginaw, Thomas, Swan Creek and Spaulding Townships, of Saginaw County.

Dr. H. B. McCrory, A. A. Reid, John P. Crippo, Jr., and Dr. L. G. Grossman of Saginaw, and James McNamara and T. L. McNamara, of Birch Run, have secured scattered leases amounting to close to 2,000 acres, most of which is in Taymouth Township.

The Gardner Petroleum Co., Tulsa, Ok'a., filed a lease of 260 acres in Buena Vista Township, Saginaw County, for record.

The Farmers' Mutual Leasing Association filed four leases at Saginaw on 295 acres in Taymouth Township.

Ewart G. Thompson, Payne, Ohio, filed two leases of 6 and 8 acres, within the corporate limits of Saginaw.

## Atlantic Receipts Fail to Show Gain For Month of May

By N. O. Fanning

*New York Bureau, The Oil and Gas Journal,*

NEW YORK, June 12.—Receipts of crude and refined oil at Atlantic coast ports during the month of May are estimated at 16,183,000 barrels, a daily average of 523,000 barrels, compared with a total of 17,070,000 barrels in April, or 564,000 barrels daily. In May, 1925, receipts totaled 16,691,000 barrels, a daily average of 538,000 barrels.

Receipts from the various sources for May 1926, April 1926, and May 1925, are estimated as follows (daily average in barrels):

| | May 1926 | April 1926 | May 1925 |
|---|---|---|---|
| Baton Rouge and New Orleans | 62,000 | 88,000 | 42,000 |
| Port Arthur, Sabine and Beaumont | 143,000 | 135,000 | 147,000 |
| Texas City, Houston and Galveston | 113,000 | 103,000 | 123,000 |
| Gulf Coast | 318,000 | 326,000 | 312,000 |
| Pacific Coast | 66,000 | 92,000 | 81,000 |
| Mexico | 114,000 | 126,000 | 136,000 |
| South America* | 25,000 | 20,000 | 9,000 |
| Total | 523,000 | 564,000 | 538,000 |

*Including Trinidad.

The May receipts exhibit no important change, either from the record of April, 1926, or May 1925. Receipts from the Pacific Coast and Mexico show some falling off, while imports from South America show a gain.

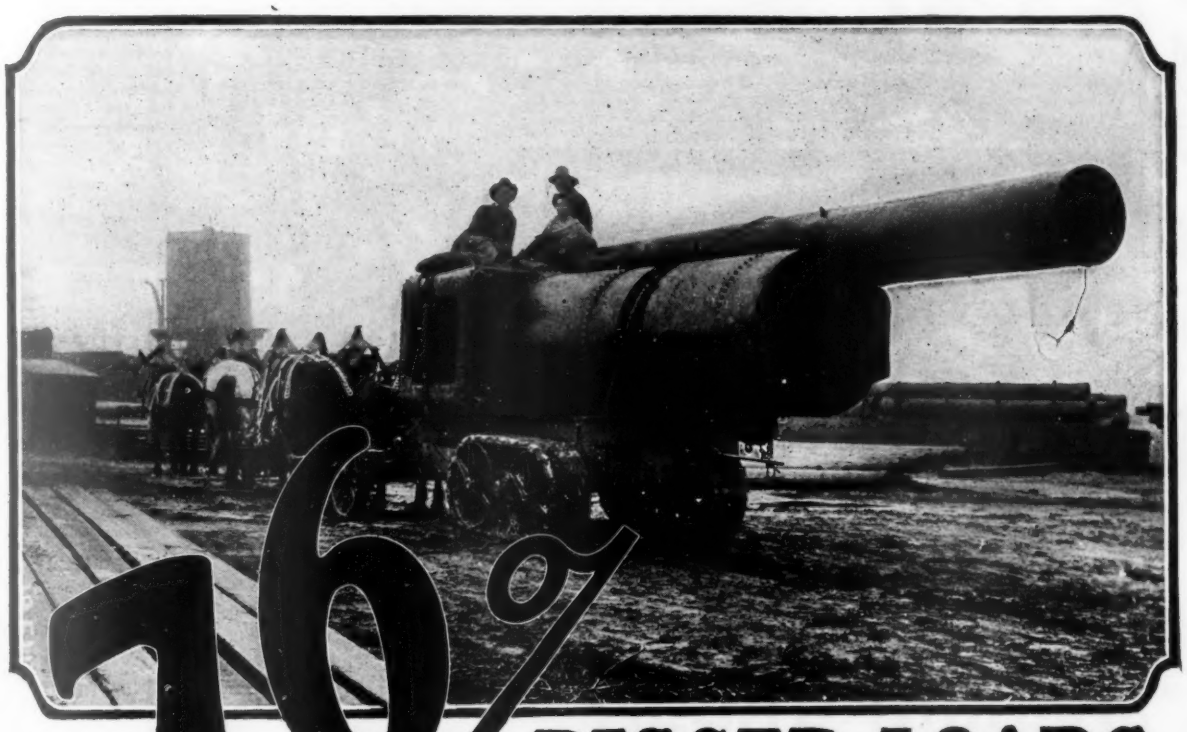
The only idea that occurs in connection with a study of the May receipts is that of their failure to show a gain in view of the record oil consumption reported this year on the Atlantic Coast, and record exports from Atlantic ports.

**June Outlook.**

One feature in connection with the outlook for June receipts is the report that the Standard Oil Co. of New Jersey is planning to export petroleum from Colombia, South America, beginning this month. This oil is expected to come to New York, perhaps at the rate of 10,000 bbls. a day or more.

## EARL OLIVER & CO.

Earl Oliver, nationally known petroleum engineer has established the petroleum engineering firm of Earl Oliver & Co. Those associated with him are Earl Trager, formerly with the Marland Oil Co., and Empire Gas & Fuel Co.; C. F. Marshall, formerly with the Gypsy Oil Co. and Marland Oil Co., and a staff of experienced technical men whose names are not at this time avaliable. The firm's headquarters will be in Ponca City, Okla.



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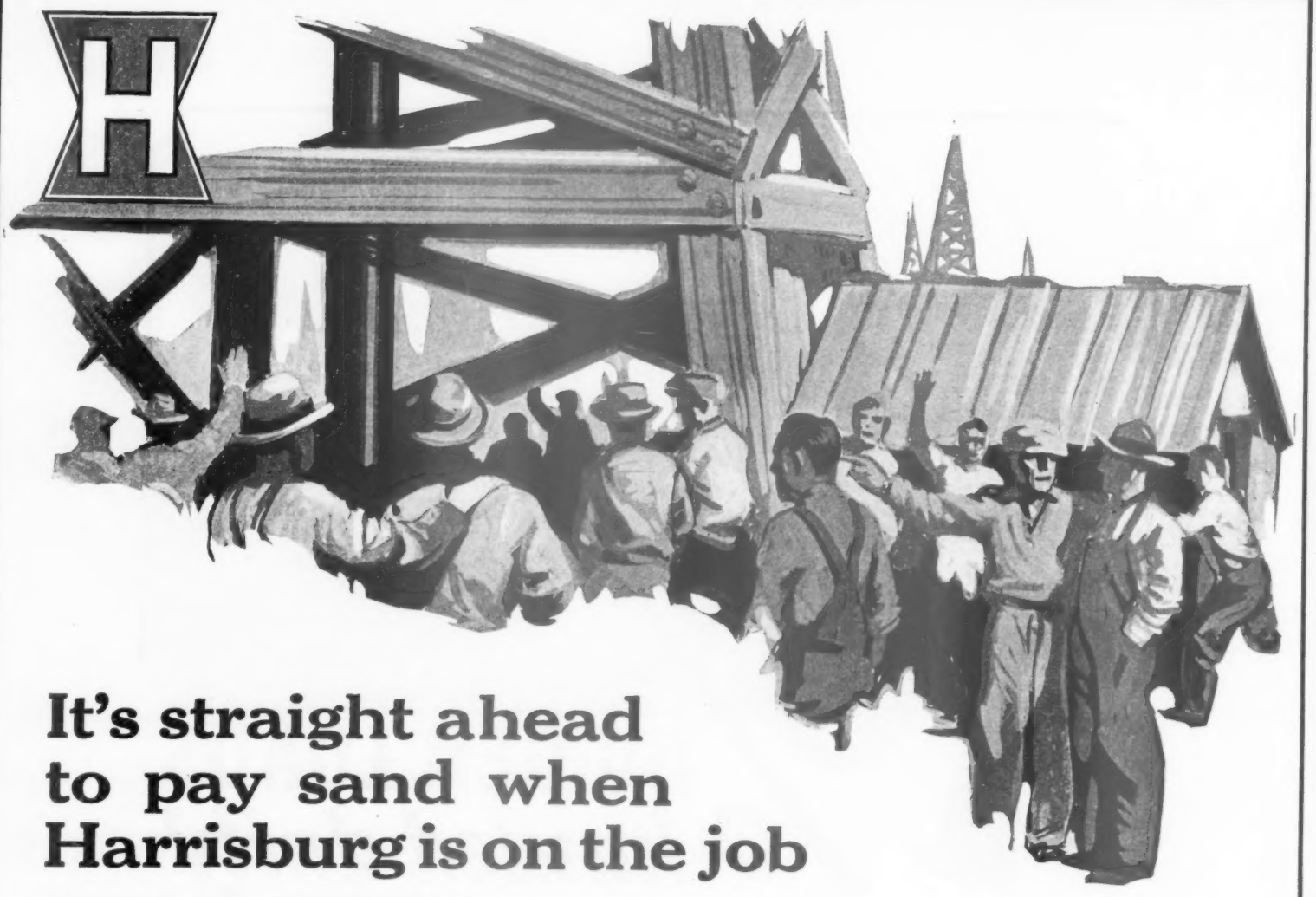

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## CALIFORNIA FIELDS

(Continued from Page 60)

power, efficiency and economy of electrical equipment and if this well should pick up another producing horizon within the near future, it is believed similar equipment would be used in the drilling of additional holes.

Although the Union is doing considerable work in the Fullerton Field, the company is not neglecting its various leases in the Richfield district. At present the company is making preparations to start work on another hole in the latter field and will spud in as soon as the equipment has been installed in the new well, No. 6 Coyle. The California Petroleum recently spudded in a new driller at Richfield, No. 20 Yarnell, now at 998 feet, and the General Petroleum will follow a similar procedure shortly, as a rig is going up for No. 1-A Thompson.

### Ventura

The Associated's No. 18 Lloyd in the southern part of the Ventura Avenue Field proved a distinct disappointment in that it failed to even show a fair production when put on a test early this week at 5,447 feet. It is quite possible, of course, that a thorough cleanout job or another few hundred feet of hole will change the outlook entirely. The nearest thing to a completion in this area during the week was the recompletion of No. 10 Lloyd, which was returned to production after being redrilled and deepened to 4,910 feet. It started off slowly but has since built up to 800 bbls. daily, the oil testing 29.6 degrees. The comparatively small production secured is due to the fact that the well is producing in the upper zone.

The Associated's next completion will probably be No. 3 Hartman, which looks quite promising at 5,169 feet. The Shell should be in a position within a short time to bring in three or four new wells and, although No. 20 Gosnell, scheduled for completion early this week, ran into a fishing job, it is believed the lost drill stem will be recovered within 10 days. The Petroleum Securities seems to be making unusually slow progress with No. 1 Willett and No. 1 Orton, but as they are outposts it is probably really better to go along slowly, as this is a rather treacherous field because of the unusually large amount of gas.

The Bolsa Chica's No. 1 Hartman in the northern part of the field is expected in some time within two or three weeks and if the showings found to date are any criterion as to what may be expected, the company will bring in at least a 1,500-bbl. well from around 5,100 feet. G. J. Magenheimer's No. 1 Hartman, a few hundred feet north of the Bolsa Chica's well, is running true to form and stands an excellent chance of getting commercial production, as the logs of these two wells indicate the structure is not plunging as rapidly as has been believed.

The Chanslor-Canfield Midway Oil Co.'s No. 1 Hobson, about midway between the Ventura Avenue Field and the ocean front, is rotating ahead in a sandy shale at 4,300 feet. Oscar Howard and King Gillett's No. 1 Elkins on South Mountain in Ventura County, is drilling ahead in a hard brown shale at 2,100 feet, with a fairly good chance of securing production. The Standard has just about finished rigging up at Camarillo and this hole will be spudded in some time within two weeks.

### Midway-Sunset

The Beverly Oil Co.'s No. 8 Lewis in the northwest quarter of Section 6-11-23, came in during the early part of the week flowing 425 bbls. daily from 2,152 feet. The Beverly has a rig up for No. 9 Lewis, an offset to the Standard's recent completion, and will probably spud in within a few days. The Standard's No. 16, finished last week, is flowing approximately 2,600 bbls. daily and the company has already started deepening No. 17, one location to the east, in the hope of bringing in another good well. The Union is drilling ahead in a hard conglomerate in No. 7 Lewis, Section 10-11-23, at 4,940 feet and the company expects to pick up the pay encountered in the Standard's No. 2 Rass, somewhere around 5,200 feet.

Although the price of potential oil land in the Mount Poso area has taken a decided jump during the past few weeks, there is a considerable amount of leasing still going on. The California Petroleum and Petroleum Securities all acquired additional acreage during the past 10 days from various individuals. The California Petroleum, through the Midland Oilfields, a subsidiary company, acquired 420 acres from Dwight G. Vedder on a 30 per cent royalty basis. Both lessee and lessor will bear 50 per cent of the drilling and operating costs, Vedder's share of the expense being deducted from the value of the oil produced. The General Petroleum signed up a 640-acre lease in Section 19, 21, 26 and 27 and closed another 100-acre deal about 3 miles south of the Shell's discovery well. So far there has not been any additional drilling on the Poso Creek structure, although it is believed several wells will be spudded in within 30 days. George F. Getty, the Barnsdall, Superior and others are all drilling several miles away from the discovery well and may perhaps secure commercial production as Getty's well in Section 20-27-27 looks promising if a successful water shutoff can be effected.

### Southern California Wildcats

The failure of George W. Johnson to develop commercial production in his wildcat in the Manhattan-Hermosa Beach area will probably result in a shifting of interest from this district to Seal Beach during the next few months. At the latter point the Union has already reached a depth of 3,250 feet in its No. 1 Bryant and the Marland has spudded in its second well on the Bixby lease. The Associated is also busily at work again and the activities of these three companies will, no doubt, prove interesting from now on. In addition to drilling a wildcat at Seal Beach, the Union is putting down a test on the Howland ranch west of the Inglewood Field, in which area the Sentinel Oil Co. drilled a 4,500-foot duster a year or so ago. The two locations are far enough apart to give the Union a good chance of opening up a new field at this point. The Marland has just secured a 100-acre tract not far from the Howland lease but immediate drilling is not contemplated as the lease was taken principally for protection.

The Marland has concluded that further work at Hyde Park would be useless and the company is accordingly filing an abandonment notice on No. 1 Connelly, the hole being classified as a duster at 5,500 feet. The company has resumed drilling on the Wickham well in the Newhall-Saugus area following the failure to develop production from an upper showing and the bit has just passed the 3,000-foot level. The Superior has also decided to resume drilling on a wildcat which showed promise of resulting in production and, although the negative results secured on testing out No. 1 Joughin were rather disappointing, work has been resumed and the well is now going ahead at 4,200 feet.

The Barnsdall has just spudded in No. 1 Merlo at Avocado Heights in the Puente sector and as the company has installed first-class equipment, the test will undoubtedly be a conclusive one. The company has leased approximately 1,000 acres in a solid block and will be sitting pretty if a new field is opened up. The Standard is rotating ahead in No. 1 University in the San Fernando Valley at 1,200 feet and, although the Petroleum Securities was expected to have started work on No. 1 Sesnon at Rosita early this week, the company has not yet done so. The Standard are spudded in No. 1 Austin at Topango Canyon yesterday morning and, due to the shortage of water in this area, cable tools will be used. This will result in a smaller amount of footage daily but the company was obliged to use this type of equipment because of the difficulty getting water.

The Zenith Oil Co. put its No. 3 Tebo on a production test at 681 feet and it is pumping about 20 bbls. fluid daily, 50 per cent of which is water. The oil from this well, which is near Corona in San Bernardino County, Section 32-2-8, is heavy, testing about 10 degrees in grav-


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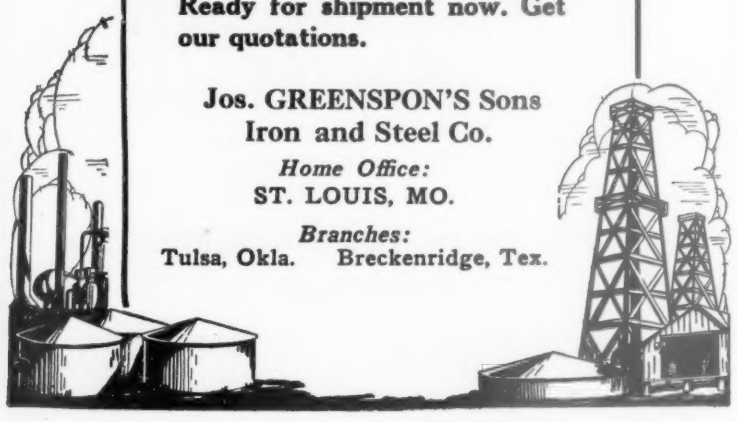

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ity. Because of the low grade oil and small production only a limited amount of work is anticipated.

**Northern California Wildcats**

One of the most promising wildcats in California at present is perhaps the Bolsa Chica's test in the Kettleman Hills area, which is now down 2,002 feet with something like 1,200 feet of oil in the hole. The presence of oil, however, does not assure commercial production, as it will be remembered the company made a production test several weeks ago from a somewhat shallower depth and resumed drilling upon the failure of the well to make even a small production on the beam. As the bit went deeper, however, the showings increased and the outlook is quite promising and it would not be at all surprising if this company succeeded in finishing a small shallow pumper when a test is made within the next three weeks. The Bolsa Chica has approximately 1,000 acres under lease and, because of this large holding, is drilling ahead slowly and cautiously. The Union Oil Co. and several other major operators are well protected, as was the case at Poso Creek, which the Shell proved up several weeks ago.

The Shell's Moorpark wildcat, No. 1 Berlywood, is still in the hard conglomerate, which was picked up several weeks ago, and a check of the present depth, 3,766 feet, shows that only a small footage is being chalked up daily. The Nugent Oil Co. is abandoning No. 1 Catlin near Carpenteria in Santa Barbara County as a duster at 4,549 feet and the equipment is being dismantled and moved out. The Honolulu Consolidated returned the Hastain-Purman wildcat in the Gould Hills to the original owners several weeks ago and it is being plugged back from 2,185 feet to 1,490 feet, at which depth a production test was be made of the small showings encountered when drilling.

The Rosedale test of A. G. Schwartz is rotating ahead in a hard sand at 1,444 feet and, although this wildcat has been receiving considerable attention, there have not yet been any indications to warrant the expectation of opening up a new field at this point.

The Associated is reaming its Huron wildcat in Fresno County preparatory to landing a protective string on bottom at 1,850 feet and it is believed drilling will again get under way within two weeks. The Fresno-United's second hole near Raisin City was reported early this week at 2,426 feet, the formation being a sandy blue shale. It will be recalled that the Associated drilled several dusters in this area which were abandoned several months ago.

## CANADIAN FIELDS

(Continued from Page 62)

Erickson Coulee test is drilling at 1,680 feet.

**Turner Valley Field**

In the Turner Valley Field the Royalite Oil Co.'s No. 5, LSD 13, Section 7-20-2w5, has recovered the tools and is now drilling at 3,115 feet. Royalite No. 6, LSD 16, Section 31-19-2w5, is getting ready to resume drilling at 2,854 feet. This test has been tied up by litigation in regard to the land rights, initiated by R. J. Stuart of Toronto, but an agreement has been reached with Mr. Stuart to enable the drilling to continue pending the hearing of the suit.

In the Turner Valley Field, Dalhousie Oil Co.'s No. 1, LSD 4, Section 18-20-2w5, has recovered the lost bailer and resumed drilling at 3,546 feet, with a noticeable increase in gas pressure. Dalhousie No. 3, LSD 10, Section 13-20-3w5, is drilling at 3,330 feet.

Great West Oil Co.'s No. 1 SE Section 7-20-2w5, is reported drilling below 1,950 feet. The test has had some difficulty with caving formations. Great West No. 2, in the same section, is rigging up. Great West No. 3, in the Montana field, Section 24-35-3w, has a considerable gas flow and some oil and is drilling in the lower Ellis sand around 1,600 feet.

Illinois-Alberta Oil & Refining Co., LSD 14, Section 12-20-3w5, is reported drilling at 3,615 feet, apparently on top of the Madison limestone, and making hole slowly. Another small gas flow was struck. As soon as the limestone is reached, the 4¾-inch casing will be set and open hole drilled into the limestone.

Vulcan Oils, Ltd., No. 1, LSD 11, Section 13-20-3w5, has finished underreaming and resumed drilling at 4,785 feet. This is the deepest test in the field.

McLeod Oil Co. No. 2, LSD 16, Section 1-20-3w5, is cementing casing at the bottom of the well at 3,661 feet. The gas has been practically shut off, only about 270,000 feet a day coming out of approximately 8,000,000 feet open flow encountered in the various horizons already drilled. As soon as the cement sets the well will be drilled in.

In the south end of the Turner Valley, Belgo-Canadian No. 1, Section 4-19-2w5, is waiting for engine and cable to resume drilling at 4,327 feet.

Spooner Oils, Ltd., No. 1, Section 13-20-3w5, has a derrick up. British Dominion No. 1, LSD 4, Section 5-20-2w5, has spudded in. Highland Oils, Ltd., LSD 5, Section 5-20-2w5, has spudded in. This test has a heavy standard outfit on the ground to carry them 4,000 feet. Tht officers are: President, L. D. Taylor, Vancouver, B. C.; vice president, J. J. Bowlen; secretary, J. M. Dillon; directors, C. S. Bell and H. I. Wilson. William McCullough is head driller. driller.

**Drilling Record**

Advance Oil Co. No. 2, LSD 14, Section 20-19-2w5, has spudded in. Advance No. 1, same section, at 3,200 feet is lifting casing and underreaming. Dallas Oil Co. No. 1, LSD 11, Section 20-19-2w5, is reported drilling below 1,300 feet. The crew made 70 feet of hole on one tour recently, which is claimed to be a record for standard drilling in the Turner Valley. The 15½-inch casing is being carried down immediately behind the drill.

Unity Oils, Ltd., has a location in LSD 15, Section 35-19-3w5, and is planning to start a test before August 1. Ralph Chamberlain of Montana is field superintendent. Pinnacle Oils, Ltd., has been organized with $1,000,000 capitalization and head office at Calgary, and has a tentative location for No. 1 well in LSD 9, Section 34-19-2w5. Officers of the company are: President, F. G. Thompson, vice president, George N. Kievall; secretary-treasurer and manager, Charles J. Summers. Angus Oils, Ltd., is arranging for a test in the north end of the Turner Valley, in either Section 3 or 5, Township 21-3w5. Alert Oils, Ltd., which has a location in the Wainwright Field, has spotted a second test in the Turner Valley, NE LSD 7, Sec-31-19-2w5. Officers of the company are: President, Edward G. Brown, Vancouver, B. C.; vice president, Alex C. Macdougall, Calgary; directors, W. G. Wasmansdorff, Vancouver; W. S. Herron, Calgary; D. F. Davidson, Calgary.

Dakota Oils, Ltd., has located a test in LSD 15, Section 3-20-3w5, not far from the site of the old United No. 1 well. This test was drilled at the time of the Calgary boom in 1914 but on reaching the Madison limestone at around 3,000 feet was discontinued, as it was then thought the Madison lime would not produce oil. Dakota Oils, Ltd., will drill into the Madison limestone at this point where it is, apparently, some 500 feet higher than in the Royalite No. 4 gusher. Officers of the company are: President and managing director, William Bateman; vice president, Frank A. Brown, Nanton, secretary-treasurer, Hans Kruse; directors, S. T. Wright, A. E. Irving.

**Duluth Company In**

New Valley Oil Co., LSD 4, Section 6-21-2w5, is rigging up, and expects to spud in about June 20. Titan Oil Co., largely backed by Duluth, Minn., capital, has spotted a test in the NW, LSD 2, Section 18-20-2w5, about a half mile from Royalite No. 4. F. Beresford will be field superintendent for the company.

Calmant Oils, Ltd., LSD 2, Section 1-20-3w5, is working on derrick. Golconda Oils, Ltd., has located at test in LSD 13, Section 26-19-3w5, in the Black Diamond area. On the completion of

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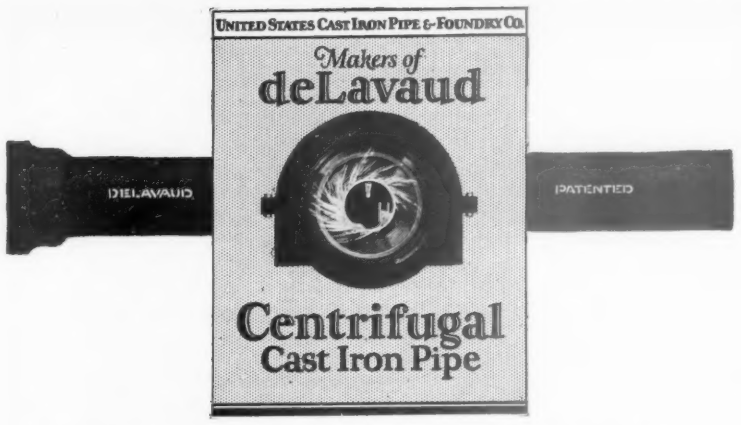


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this test the company is planning to drill No. 2 on acreage in Montana. Officers of the company are: President, William S. Fuller; managing director, F. W. Cottrell; directors, Reg. Balfour, W. R. Stewart, Wilfred Chambers; secretary-treasurer, F. L. Major.

Stockmen Oils, Ltd., is bringing in derrick timbers for a test in Section 27-20-3w5, and has camp buildings under construction. Carl Olson is field manager and Joe Scruggs head driller. A string of tools is being brought from the Montana fields. Cooper-Nanton Oils, Ltd., LSD 2, Section 7-20-2w5, is reported rigged up ready to spud in.

Alberta Petroleum Consolidated Co., Ltd., which operated in the Calgary Field for some years after the 1914 boom, has under an order of Mr. Justice Walsh been restored to the register of joint stock companies. This step is preliminary to an investigation being instituted by certain shareholders into the disposal of the assets of the company.

Anaconda Oils, Ltd., has a location in LSD 13, Section 20-19-2w5. Hylo Oils, Ltd., is constructing a drilling camp in LSD 13, Section 20-19-2w5. Madison Oils, Ltd., has a location in LSD 8, Section 34-20-3w5. Neptune Oils, Ltd., has spotted a test in LSD 15, Section 4-20-3w5. New McDougall-Segur Oil Co. has a derrick up in the NW, Section 12-20-3w5.

In the Moose Mountain district, Signal Hill No. 1, LSD 9, Section 34-23-5w5, is at 2,025 feet and shut down waiting for casing. Signal Hill No. 2, same section, is partially rigged up and waiting for equipment. Reserve Oils, Ltd., Morley Indian reserve, is drilling below 425 feet with casing closely following the drill. Some slight showings of oil and gas have been met in the Benton shales. Cherokee Oil & Refining Co. No. 1, Section 33-23-5w5, is below 1,675 feet and drilling. The same company will drill a second test on the Rickert structure in the Rocky Mountain forest reserve, having secured 720 acres in LSD 8 and 8, Sections 31-19-4w5 and 22-19-6w5.

**South of Calgary**

In the Aldersyde district, south of Calgary, Ranchmens' Oil & Gas Co. has located its test in LSD 16, Section 13-20-19w4, close to the town of Aldersyde, and is bringing in a heavy standard outfit for the test. Gas has already been encountered in two shallow tests on this structure, and it is expected the drill will get the middle of the Dakota-Kootenay formation between 2,600 and 2,800 feet.

In the Acadia Valley, Fuego Oil Co., Section 34-25-4w4, close to the Saskatchewan boundary, is reported down to 2,375 feet, with nearly all the casing run, and is underreaming.

In the Medicine Hat Field, No. 1 Roth Syndicate, within the Medicine Hat city limits, is at 3,940 feet with a hole full of sulphur water. Further drilling will be abandoned, and the hole plugged with cement from the bottom up to the Milk River gas sand, and finished as a gas well. Under the arrangement with the city of Medicine Hat, the municipality will take over the production and pay for the test. It is reported that the Roth Syndicate will drill a second deep test at a point higher on the structure.

In the Foremost Field, United Oils, Ltd., of Calgary, is reported down 2,036 feet with casing cemented ready to drill into the gas sand. Drilling will be continued below the gas sand as a deep test for oil.

It is unofficially reported that Imperial Oil, Ltd., is locating a test in Section 29-2-3w4, about 6 miles northeast of Onefour, Alta.

**Border Field**

In the Border Field, Urban Oils, Ltd., Section 4-1-15w4, near Coutts, has shut off the water at 2,850 feet with a packer and is reported drilling at 2,890 feet. On the Montana side, No. 1 Monalta-Johnson, Section 27-35-1w, close to Sweetgrass, after getting 500,000 feet of wet gas at 1,860 feet, is reported drilling at 2,000 feet. The 10-inch casing was set in a hard formation at 1,925 feet. Pass Oils, Ltd., of Lethbridge, Alta., has located No. 1 test in the Kevin-Sunburst Field, some miles east of Kevin.

In Northern Alberta, in the Peace River Field, the Western Provinces Oil Co., Section 32-83-21w5, is resuming work at 1,542 feet. The drilling is in charge of George Stafford.

In the Ontario fields, Union Natural Gas Co.'s No. 19 deep test in Dover Township, Kent County, got a small gas production in the Trenton limestone at 3,050 feet. The test is not as deep as the other Dover producers, but went somewhat deeper into the Trenton; it is only 850 feet from No. 13 Union, the big producer, and has apparently got an offshoot of the same production. Union Natural Gas Co. is now engaged in cleaning out its old wells and getting them in shape for next winter, but may later drill a test in the Dawn Township Field, Lambton County.

In Zone Township, Kent County, the Colchester Oil & Gas Co.'s deep test north of Thamesville, was carried into the granite at approximately 3,981 feet. Small showings of oil and gas were met in the Potsdam sand underlying the Trenton limestone, and a shot was tried, but failed to develop commercial production. The test will be abandoned and the casing pulled.

In Norfolk County, the Dominion Natural Gas Co. has located a new test for gas, about 2 miles south of Courtland.

In Lambton County, the Petrolia Syndicate, which got a fair shallow pumper recently on the Joseph Barbour farm, Brooke & Enniskillen sideroad, has started another shallow test, 300 feet southeast of No. 1. W. J. Hussey is in charge of the drilling. No. 1 is pumping around 12 bbls. a day, and will likely develop a settled production of 4 to 5 bbls.

**Saskatchewan**

In the province of Saskatchewan, Unity Valley Oils, Ltd., SE, Section 23-41-24w3, has the rig up ready to spud in and will start drilling next week. A combination rotary and standard outfit is being used, and drilling operations will be in charge of S. F. Flater. This is the first test to drill in this section of Saskatchewan, the nearest previous test being the Imperial Oil, Ltd.'s test drilled about 1920-21, at Muddy Lake, which finished a dry hole. The Unity test is on a different structure.

## N. LOUISIANA-ARKANSAS

(Continued from Page 56)

Section 16-17-16, is making 30 bbls. on the pump at 2,134-55 feet. Magnolia Petroleum Co.'s No. 5 Dumas, Section 9-17-16, is pumping 70 bbls. from the sand at 2,080 to 2,120 feet and Magnolia's No. 7 Slaughter, Section 9-17-16, is flowing 50 bbls. through 2-inch tubing from sand at 2,096 to 2,124 feet.

Pure Oil Co.'s No. 4 Slaughter, Section 4-17-16, pumping 80 bbls. from sand at 2,118-35 feet. Reynolds & Marr's No. 1 Mooty, Section 22-17-16, southeast corner of the field, is making 25 bbls. on the pump from sand at 2,147-82 feet. Rovenger Oil Corp.'s No. 5-A Goodwin, Section 16-17-16, flowing 75 bbls. through 2-inch tubing, from sand at 2,099 to 2,129 feet. Roxana Petroleum Corp.'s No. 5 Flournoy, Section 4-17-16, was the best completion of the lot and is making 115 bbls. on the pump from sand at 2,095-2,127 feet. Simms Oil Co. put three on the beam on the Perry lease, Section 16-17-16. No. 5 is good for 20 bbls. at 2,080 to 2,120 feet; No. 6 is equally as good a pumper at 2,078 to 2,103 feet and No. 7 is making 18 bbls. at 2,070 to 2,110 feet. Wingfield and associates' No. 3-A Slaughter, Section 9-17-16, is pumping 25 bbls. from 30 feet of sand topped at 2,086 feet.

In the north part of the field Allday Drilling Co.'s No. 2 Murphy, Section 4-17-16, is drilling at 1,513 feet. Atlantic's No. 8-B Andress, Section 16-17-16, is waiting for 6-inch to set at 2,085 feet and surface casing was set at 125 feet at Atlantic's No. 4 Goodwin, Section 16. Gulf Refining Co. has started developing its acreage around Lisbon and a rig is up for No. 1 Primm, 200 feet south and

1,120 feet east NW cor. Section 21-17-16.

**Deep Test in Lisbon**

Hickman and associates' deep test in Lisbon, No. 1 Slaughter, Section 3-17-16, is coring at 2,908 feet. On the Humble's Goodwin lease in Section 16, No. 5 is drilling at 1,300 feet and No. 6 at 1,400 feet. H. L. Hunt's No. 5 H. O. Murphy, Section 4-17-16, is drilling at 1,475 feet. The cement plug at 2,080 feet at Keisker and associates' No. 1 Harrell, Section 15-17-16, is being drilled out. Six and five-eighths inch casing was cemented at 2,118 feet at Lion Oil & Refining Co.'s No. 9-A Mitchell, Section 17-17-16. Surface casing was set at 250 feet at Magnolia's No. 2 Dumas, Section 9-17-16, and No. 6 Dumas is drilling at 1,230 feet. Magnolia's No. 2 on the Harrell lease, Section 4-17-16, is going ahead at 1,200 feet. Six and five-eighths inch casing was cemented at 2,090 feet at Magnolia's No. 6 Slaughter, Section 9-17-16.

Miller & Cottingham's No. 6 Slaughter, Section 9-17-16, had the sand at 2,092 to 2,117 feet and has 1,000 feet of oil in the hole. Ten-inch casing was set at 101 feet at No. 2 and at 104 feet at No. 3 on the Natural Gas & Fuel Corp.'s Willett lease, Section 4-17-16, and a rig is up in the NW SE NE, for No. 4 Willett. Six-inch casing was cemented at 2,112 feet at Ohio Oil Co.'s No. 3 Goodwin, Section 21-17-16, and No. 4 Goodwin is drilling at 400 feet. Pure Oil Co.'s No. 1-N Harrell, formerly No. 1, Section 4-17-16, is drilling at 2,112 feet; No. 2 Harrell, now No. 1-E, is drilling at 2,060 feet; No. 3, now No. 2-N Harrell, has been spudded; No. 4 Harrell, now O-A, is spudding. Reynolds & Marr's No. 2 Goodwin, Section 21-17-16, has started drilling.

On the Rovenger Oil Corp.'s Goodwin lease, Section 16-17-16, No. 2-B is drilling at 850 feet. Rovenger's No. 2 Harrell, Section 15-17-16, has 200 feet of oil in the hole from sand at 2,116-52 feet and is waiting for a standard rig. Roxana's No. 6 Flournoy, NE SE SE, Section 4-17-16, is drilling at 100 feet. Simms Oil Co.'s No. 8 Perry, Section 16-17-16, is drilling at 1,290 feet. Southern Crude Oil Purchasing Co.'s No. 3 Slaughter, Section 3-17-16, is drilling at 950 feet. Summerfield and associates' No. 1 Jackson, SE NW NE, Section 17-17-16, is a derrick pattern. Six-inch casing was cemented at 2,069 feet at Wingfield and associates' No. 1-B Slaughter, Section 3-17-16.

**Smackover Completion**

Smackover on the Union County side presented a sorry completion report. Only one oil well was completed and a 2,600-foot test was abandoned. In the Norphlet area Eason and associates' No. 8 Murphy, Section 15-16-15, is making 90 bbls. naturally through the 2-inch tubing from sand at 2,599 to 2,608 feet. South of Kenova Magnolia Petroleum Co.'s No. 4 Tatum, Section 7-16-15, was abandoned with the casing in the hole at 2,130 feet. The test was dry at 2,626 feet and was plugged back to the Nacatoch sand in a futile attempt to save a well.

Arkansas Drilling Co.'s No. 1 Rogers, Section 20-17-15, on the northern edge of the El Dorado city limits, is to be abandoned at 2,202 feet. F. A. Book's No. 1 McDonald, Section 1-16-16, is drilling at 2,000 feet. A fishing job at 2,400 feet is delaying G. J. Child's No. 3 fee, Section 8-16-16. Surface casing was set at 95 feet at Eason and associates' No. 9 Murphy, Section 15-16-15. Garrett and associates' No. 1 Ford, Section 30-19-14, is drilling in shale at 1,640 feet. Arrangements are being made to core at 2,876 feet at Gaughan & Sifford's No. 1 Parks, Section 28-16-16. Grimes & Jones' No. 1 Alphin, Section 6-18-14, is drilling at 150 feet. Gulf Refining Co.'s No. 21 T. C. Murphy, Section 9-16-15, is drilling at 1,275 feet. Hatfield and associates' No. 2 Ennis, Section 23-17-16, tested dry with a light show of oil at 2,182 feet. The rig has been moved off and the test temporarily abandoned. F. C. Henderson's No. 2 Fitzgerald, Section 8-18-15, formerly Olvey and associates' No. 2, which was completed at 2,184 feet for a 1,200-bbl. well in July, 1921, is being deepened and is drilling at 2,197 feet. Arrangements are being made to deepen Henderson's No. 2 Pratt, Section 8-18-15, which was completed late in 1921 as a 60-bbl. well at 2,154 feet.

Hollyfield and associates' No. 13 Giller, Section 10-16-15, is drilling at 2,378 feet. Howell and Knowles' No. 2 Springer, Section 36-17-16, tested salt water at 2,559 feet. Humble Oil & Refining Co.'s No. 6-B Flenniken, Section 9-16-15, is drilling at 2,130 feet. Same company's No. 2-B Lawton, Section 7-16-15, is drilling in sandy shale at 2,700 feet. While trying to pull the drilling stem from 2,701 feet where it stuck the derrick was pulled in at H. L. Hunt's No. 2 Swilley, Section 28-16-16, killing H. L. Lewis, derrick man. Hunt's No. 3 Swilley, Section 27-16-16, is drilling at 1,029 feet. Imperial Oil & Gas Co.'s No. 1 Goodwin, Section 26-17-16, is drilling below the 2,000-foot level. E. M. Jones' No. 1 Foster, Section 19-16-16, is drilling at 1,025 feet.

**Surface Casing Set**

Surface casing was set at 117 feet at Jones & Murphy's No. 1 McDonald, Section 27-19-16. Lion Oil & Refining Co.'s No. 1 Coombs, Section 25-18-16, is drilling at 2,898 feet. Four and one-half inch casing was cemented at 2,676 feet at Lion's No. 8 Flenniken, Section 10-16-15. Magnolia's No. 5 Tatum, Section 7-16-15, had a light show of oil and gas along with salt water at 2,625-28 feet and junk is being fished out at 2,631 feet. Eight and one-half inch casing was cemented at 2,592 feet at Magnolia's No. 1 Childs, Section 8-16-16, and a derrick is up for No. 2 Childs, SW SE NE, Section 8-16-16. Mazda Oil Co.'s No. 6-R Lawton, Section 10-16-15, tested salt water at 2,617 feet and is being plugged back 3 feet. McGaha and associates' No. 1 Haney, Section 11-17-16, is drilling at 2,660 feet.

Murdock and associates' No. 8 Hays, Section 4-16-15, is drilling at 2,250 feet. Same operators' No. 1 Vestal, Section 17-16-15, is being deepened. Ten-inch casing was set at 130 feet at Natural Gas & Fuel Corp.'s No. 1 Carey, Section 17-16-15. Leo P. Pukrul's No. 2 Smith, Section 17-16-15, tested salt water at 2,038 feet and was plugged back 5 feet and tested salt water. Plugging back 3 feet more did not help and the test is shut down at 2,030 feet for orders. A. H. Ramage's No. 1 fee, Section 27-16-16, is drilling at 2,481 feet. Location has been staked for Sam Richardson's No. 2-M Murphy, NE NE SW, Section 14-16-15. Arrangements are being made to test 4 feet of sand topped at 2,671 feet at C. L. Saxon's No. 1-B Saxon, Section 9-16-16, but while 6-inch was being lowered it stuck at 2,540 feet and is being cemented there. The plug will be drilled out and a liner set to the top of the sand.

Simms Oil Co.'s No. 2-A H. B. Murphy, Section 15-16-15, is drilling at 2,260 feet and a rig is up in the NE SW NW for Simms' No. 3 Murphy, same section. Southern Crude Oil Purchasing Co.'s No. 4-A Wells, Section 15-16-15, is a rig. Sun Oil Co.'s No. 9 Brown, Section 8-18-15, is drilling below the 2,695-foot level. A short string of 4½-inch casing is being cemented at 2,615 feet to test 3 feet of sand at Weiss & Simmons' No. 1 McElroy, Section 4-16-16. A rig is up for Williams and associates' No. 3 Goodwin, NE NE SW, Section 16-16-14.

**Ouachita County**

Ouachita County's contribution to Smackover was a big gas well. The big gasser was Simms Oil Co.'s No. 11 Hildebrant, Section 28-15-15, which came in making 42,600,000 feet of gas with 1,275 pounds rock pressure from 4 feet of sand topped at 2,713 feet. The other completion was the Magnolia's No. 2 Watson, Section 31-15-19, in the Stephens Pool which is making 15 bbls. on the pump at 2,185 to 2,200 feet.

H. M. Harrell's No. 2 Moline Timber Co., Section 17-12-17, cored dry sand at 1,592 to 1,631 feet and is drilling in shale at 1,707 feet. Humble's No. 11-B Arnold, Section 26-15-16, is 25 feet in sand topped at 2,736 feet and a string of 4½-inch casing is being set on top of the sand to make a test. Magnolia's No. 1-B Rhoten, Section 32-15-15, formerly completed as Bailey Murray Oil Co.'s No. 1-B, is being deepened. Magnolia's No. 2 Murphy, Section 30-15-16, is shut down in sand at 2,273-83 feet, waiting for a standard rig. A. Meek's No. 1 Clawson, Section 35-15-17, is a rig. Six-inch casing was cemented at 2,599 feet at Ohio Oil Co.'s No. 8 Goodwin, Section 29-15-15. Phillips Petroleum Co.'s No. 1 Tate, Section 9-14-17, cored the Blossom sand at 2,154-57 feet and is now coring at 2,338 feet.

J. D. Reynolds' No. 1 Ratch & Cartier, Section 2-14-18, is shut down at 2,245 feet for boiler repairs. A derrick is up for Roxana Petroleum Co.'s No. 6 Berg, SE NW SE, Section 28-15-15. Simms Oil Co.'s No. 6 T. Murphy, Section 29-15-15, was dry at 2,660 feet and is being plugged back to the Nacatoch sand. Smith Drilling Co.'s No. 3 Shirey, Section 36-15-17, has resumed drilling and is going ahead at 2,230 feet. Standard Oil Co.'s No. 9 Murphy, Section 29-15-15, is going through broken sand and gumbo at 2,467 feet. Sun Oil Co.'s No. 6 Hardin, Section 27-15-16, was dry at 2,014 feet and is being drilled ahead at 2,240 feet. Sunny Jim Oil Co.'s No. 1 Hicks, Section 27-15-16, tested salt water in sand at 2,260-61 feet and arrangements are being made to set a packer to make another test. The Texas Company's No. 17 Berry, SE cor. SW NW, Section 33-15-15, is a derrick. Six-inch casing was set at 1,998 feet at The Texas Company's No. 7 Neely, Section 27-15-16. Unity Petroleum Co.'s No. 6 Umsted, Section 33-15-15, tested salt water at 2,425 feet and the bottom of the hole is being cemented. Vandiver and associates have temporarily abandoned No. 1 Yarbrough, Section 22-14-17, at 1,641 feet and have moved the rig off.

In the Stephens Field on the Ouachita County side, Buffalo Oil Co.'s No. 4 Morgan, Section 22-15-19, is waiting for 6-inch casing to set at 1,550 feet. El Dorado Union Oil Co.'s No. 1 Hall, Section 31-15-19, is waiting for a standard rig and is shut down at 2,193 feet. Surface casing was set at 80 feet and Louisiana Oil Refining Corp.'s No. 2 Green, Section 22-15-19, is drilling at 549 feet. A rig is up for Magnolia's No. 3 Watson, Section 31-15-19. Surface casing was set at 60 feet at Reynolds and associates' No. 1 Holton, Section 15-15-19.

**Columbia County**

In the southwest end of the Stephens Pool, J. E. Crosbie's No. 3 Jones-Womack, Section 36-15-20, was a failure and was abandoned at 2,175 feet. Four and one-half inch with a packer is being set at 3,327 feet at R. W. Aarnes' No. 2 Brown, Section 13-15-20. Gorden Powell & Dickson's No. 3 Jones, Section 36-15-20, is drilling at 1,700 feet. Haynesville Trust Co.'s No. 1 Wingfield, Section 18-19-19, is drilling through broken lime at 2,300 feet.

**Nevada County**

Autrey Oil Co.'s No. 3 Womack, Section 10-14-21, is coring oil sand at 1,132 feet. W. F. Furen and associates' No. 1 Whitehead, Section 27-13-21, is drilling through water sand at 1,209 feet. Humble Oil & Refining Co.'s No. 4 Bodcau, Section 10-14-21, is going through gumbo at 560 feet. Humble's No. 1-C Groves, Section 9-15-22, is being bailed to test 20 feet of broken sand topped at 1,090 feet. Webb and associates' No. 1 Haynie, Section 1-14-21, cored oil sand at 1,117 feet. Zing and associates' No. 1 Blakely, Section 27-13-20, is drilling through water sand at 1,175 feet.

**Scattered Wildcats**

Pine Prairie Oil Co.'s No. 1 fee, Section 7-17-15, Ashley County, is shut down at 3,405 feet for fuel. Location has been staked in the SW cor. SW NE, Section 33-15-11, Bradley County, for Magnolia's No. 1 Arkansas Timber Co. Southern Crude Oil Purchasing Co.'s No. 1 Calion Lumber Co., Section 1-16-14, Calhoun County, tested salt water without a showing of oil at 2,593 feet and is to be deepened. Wheelen Oil Co.'s Clark County test, No. 1 Brown, Section 35-10-20, was dry at 2,307 feet. Haley and associates' No. 1 Moore, Section 29-9-10, Cleveland County, is shut down at 2,406 feet while the rig is being repaired.

In Dallas County, McClintock & Goodka's No. 1 Olga, Section 35-13-5, is boring through hard lime at 2,395 feet. Near Bradley, in Lafayette County, Arkansas Fuel Oil Co.'s No. 4 Red River, Section 18-19-24, is drilling in lime at 3,035 feet. Same company's No. 3 Allen, same section, is being standardized. Gulf Refining Co.'s No. 1-E Red River, Section 10-19-24, is being rigged up. In Little River County, Greason and associates' No. 1 Waldrop, Section 4-13-31, is drilling at 150 feet.

## KANSAS FIELDS

(Continued from Page 52)

SW, Section 23-27-7, drilling below 300 feet. Sheldon, Nixon and others' No. 1 LaPorte, C NE SE NW, Section 25-27-7, drilling below 500 feet; Empire Gas & Fuel Co.'s No. 3 Thomas, C NW SW NE, Section 27-27-7, rig.

**Results in Greenwood**

The Phillips Petroleum Co.'s No. 2, C SW NW NW, Section 15-22-9, Greenwood County, was drilling below 300 feet. The Phillips Petroleum Co. has a rig up for No. 5 Mosby, C SE SE SE, Section 26-23-8; Manhattan Oil Co.'s No. 25 Nuttle, C NW NW SE, Section 10-23-9, rig; Skelly Oil Co.'s No. 3 Green, NE cor. SW NE NE, Section 15-23-9, rigged up; O. V. Paul's No. 1 Teeter, C SW SE SW, Section 19-23-9, tools in; Empire Gas & Fuel Co.'s No. 5 Morris, C SE SW NE, Section 19-23-9, rig up; Manhattan Oil Co.'s No. 7 Morris, SE cor. SW, Section 19-23-9, rig on ground. Mid Kansas Oil & Gas Co.'s No. 8 Hoffman, SE cor. SW NE SW, Section 30-25-9, rig; Arkansas Fuel Co.'s No. 15 Marshall, C NE SE SW, Section 1-24-9, drilling at 400 feet. Roth, Faurot and the Manhattan Oil Co.'s No. 13 Cartright, C SW NE NE, Section 1-24-9, drilling below 300 feet; Tidal Oil Co.'s No. 34 Dickinson, C SE SW SE, Section 16-26-8, drilling below 1,000 feet; Empire Gas & Fuel Co.'s No. 2 Riley, C NW NE, Section 7-27-9, machine rigged up.

The Manhattan Oil Co.'s No. 2 Scott, C SW SE SW, Section 24-23-8, Greenwood County, was dry and abandoned at 2,586 feet. The same company's No. 9 Taylor Craft, C SE NE SW, Section 25-23-8, was shot with 40 quarts in sand at 2,573-93 feet and started at 100 bbls. No. 11 Craft, C NW NE NW, Section 25-23-8, is a 25-bbl. well at 2,504-22 feet after a 20-quart shot. The Manhattan Oil Co.'s No. 23 Green, C NE SE SE, Section 10-23-9, was shot in sand at 2,295-2,327 feet and started at 100 bbls. a day. Polhamus and others' No. 4 Wiggins, C W half W half SW, Section 26-24-9, was abandoned as dry at 2,755 feet. It had sand at 2,100-55 feet, top of the lime at 2,295 feet and Wilcox sand at 2,733-52 feet. Elwell and others' No. 1 Henley, NW cor. SE SE, Section 19-25-10, was dry and abandoned at 2,152 feet.

**Cowley Developments**

In Cowley County, the Arkansas Fuel Co.'s No. 1 Wilson, C SW SE SW, Section 35-31-3e, was drilling below 300 feet. Foster & Deal have a rig up for No. 1 Eastman, C N half NE NE, Section-7-31-6. Stalling and others have a rig up for No. 1 Rice, C NE NE NW, Section 3-32-2e. J. A. Hull has a rig up for No. 4 Lewis, C NE NW NW, Section 24-32-4, and a rig up for No. 4 Barton, C NW NW NW, Section 19-32-5.

The Roxana Petroleum Corp.'s No. 1, C NE NE SW, Section 17-32-2, was flowing 200 bbls. a day while sand at 3,615 feet was being drilled in, total depth 3,660 feet. The Prairie Oil & Gas Co.'s No. 1, SW cor. SW NE, Section 34-34-2, was a 50-bbl. well after a shot in chat at 3,458-98 feet. The Phillips Petroleum Co.'s No. 1, C NE NE NE, Section 16-34-5, was dry and abandoned at 3,253 feet. Watchorn Oil & Gas Co.'s No. 1, C NE NW NW, Section 20-34-8, was abandoned as a failure at 3,130 feet.

The Empire Gas & Fuel Co.'s No. 3 Johnson, SW cor. NW NW, Section 3-32-5, Cowley County, is good for 15 bbls. a day at 2,360-85 feet. Duffield and others' No. 3 Boyd, C SW NW SW, Section 19-

32-5, got sand at 3,006 feet, total depth 3,067 feet, and was flowing 100 bbls. of oil and a little water.

**Drilling in Marion**

In Marion County, Hay & Wells and others have started drilling No. 1 Bixler, NE cor. NW, Section 12-20-4. Ray Gear and others' No. 1 Wiley, C SE SE SW, Section 33-20-5, was drilling at 1,100 feet.

Sheedy and the Empire Gas & Fuel Co.'s No. 5 Allison, C SE NW NE, Section 24-21-4e, Marion County, was abandoned as dry at 2,447 feet.

**Miscellaneous Work**

Frank Allen's No. 1 Stroda, C SE SE SE, Section 29-19-5, in Chase County, was abandoned as dry at 2,560 feet.

The Gulf Coast Drilling Co.'s No. 1 St. Johns, C SE, Section 27-8-25w, Graham County, was drilling at 1,500 feet.

The Valerius Oil & Gas Co.'s No. 18 Oswald, C NW SE NW, Section 17-12-15w, Russell County, is good for 200 bbls. initial production from sand at 2,997-3,005 feet.

The Prairie Oil & Gas Co. has a rig on the ground for No. 3 Welch, C NW NE SW, Section 35-20-6w, Rice County.

The Sinclair Oil & Gas Co.'s No. 1 Boyle, C NW NW NE, Section 17-24-3w, Harvey County, is drilling below 300 feet. Fleeger and others and the White Eagle Refining Co.'s No. 2 Graber, C NW NW NE, Section 34-27-7w, Kingman County, was drilling below 300 feet.

Hartman & Skaer have started drilling No. 1 Latta, C NE, Section 8-30-2w, Sumner County.

Liggett and others' No. 1, C NE. Section 10-23-3w, Harvey County, spudded in and shut down, taking away the tools.

## OKLAHOMA FIELDS

(Continued from Page 52)

quarts at 3,217-32 feet and it made 10 bbls. the first day.

The Jomac Oil Co.'s No. 1, SE cor. SW NE, Section 27-17-8, was a 10-bbl. initial producer after a shot in sand at 3,116-41 feet.

The Texas Company's No. 1, SW cor. SE, Section 10-17-9, was shot in sand at 1,983-2,032 feet and it started at 275 bbls C. L. McMahon's No. 1, NE cor. NW, Section 10-17 9, was a 60-bbl. initial producer in sand at 1,986-2,016 feet. The Roxana Petroleum Corp.'s No. 1, NW cor. NE, Section 10-17-9, started at 127 bbls. a day following a shot at 2,036-71 feet.

The Wilcox Oil & Gas Co.'s No. 6, SW cor. NE, Section 32-16-9, was abandoned at 2,944 feet.

The Skelly Oil Co.'s No. 2, SE cor. NE NW, Section 31-15-9, got sand at 2,313-54 feet. It was good for 20 bbls. a day, after the shot.

The Texas Company's No. 1, C NW NW SW, Section 29-14-10, found a sand at 2,808-25 feet, which was good for 10 bbls. a day naturally.

The Mid-Continent Petroleum Corp.'s No. 5, SW cor. SE NW, Section 32-14-10, made 150 bbls. a day naturally.

The Gled Oil Co.'s No. 3, CSL SE SW, Section 13-19-8, made 15 bbls. naturally from sand at 2,220-83 feet but it produced 75 bbls. the first 24 hours after a shot of 140 quarts.

The Magnolia Petroleum Co.'s No. 2, SW cor. SE, Section 32-18-7, started at 40 bbls. naturally from sand at 2,698-2,717 feet and 58 bbls. a day following a shot of 40 quarts.

C. L. McMahon's No. 2, C NE NE, Section 9-19-9, was abandoned as dry at 2,774 feet.

The Prairie Oil & Gas Co.'s No. 1, SW cor. NE, Section 23-19-10, made 450 bbls. a day after a 320-quart shot at 1,742-92 feet.

**New Work in Creek County**

The Bu Vi Bar Oil Co. has a rig up for No. 1 Watson, SE cor. SW NW, Section 11-17-8. Aztec Oil Co.'s No. 6 Johnson, CWL SE SE, Section 14-17 8, a rig; T. B. Slick's No. 1, SW cor. NW Section 10-16 8, drilling at 1,800 feet. Peters Petroleum Corp.'s No. 3, NE cor. SE NE, Section 21-16-8, a rig; McCulloch Oil Co.'s No. 1, NE cor SW, Section 24-17-9, drilling at 500 feet; Independent Oil & Gas Co. and Furman's No. 1, NW cor. SE NW, Section 8-17-10, drilling at 800 feet; O. Bailey's No. 1, SE cor. NE SE, Section 12-17-10, drilling at 500 feet; Skelly Oil Co.'s No. 1, SE cor. NW SW, Section 32-17-10, drilling at 500 feet; Wilcox Oil & Gas Co.'s No. 8, NW cor. NE NW, Section 2-15-8, drilling below 3,135 feet, an old well drilling deeper; C. G. Tibbens' No. 1 R. Williams, SE cor. Section 22-15 8, a rig; Lima Oil & Gas Co.'s No. 2, NW cor. NE NE, Section 26-14 8, rigged up; Skelly Oil Co.'s No. 5 Fields, CWL SE SW, Section 30-15 9, a rig; Noble & Lansing's No. 1 McNevin, SW cor. SE SE, Section 17-14-10, rig; Prairie Oil & Gas Co.'s No. 2 Harjo, NW cor. NE SE, Section 18-14-10, a rig; Independent Oil & Gas Co.'s No. 1-A, SW cor. NW, Section 29-14-10, drilling at 800 feet.

The Magnolia Petroleum Co.'s No. 29, SE cor. NW NW, Section 16-18-7, was drilling at 600 feet.

The Selby Oil & Gas Co. has a rig up for No. 1 Barnett, C SE NW, Section 31-19-9.

Holmes and others' No. 4 Robinson, CSL SE SW, Section 14-19-10, drilling at 2,500 feet, old well drilling deeper; Prairie Oil & Gas Co.'s No. 2 fee, C SW NE, Section 23-19-10, machine. H. U. Bartlett's No. 1 Litka, SW cor. SE SE SW, Section 19-18-9, timbers; M. P. Evans' No. 1, NE cor. NW, Section 22-18-9, drilled to 740 feet and shut down. J. A. Hull's No. 1 Sier, NE cor. Section 29-18-9, a rig.

**Pawnee County Completed Work**

The Watchorn Oil & Gas Co.'s No. 13 Miller, C SW SW, Section 33-23 3e, Otoe district, Pawnee County, found sand at 4,076-90 feet, shot it with 30 quarts and the well started at 230 bbls. a day. It was not a completion.

The Devonian Oil Co.'s No. 1, SE cor. NW, Section 35-22-6e, found sand at 2,960-70 feet, and it made 50 bbls. the first 24 hours after a 10-quart shot.

Adamson and others completed No. 3-A, CWL NE SW, Section 32-21 8. It started at 15 bbls. from sand at 2,881-2,918 feet, after an 80-quart shot.

The Industrial Oil & Gas Co.'s No. 1, SW cor. NE NE, Section 13-20-9, found a 10,000,000-foot gas production in sand at 2,400 feet. It will be tested after casing is set.

The Bu Vi Bar Oil Co. was drilling below 400 feet in No. 1, NW cor. SE, Section 26-22-5, Pawnee County. The Devonian Oil Co. has a rig up for No. 1 Hayes, SW cor. NE, Section 35-22-6e. The Miller Brothers have a rig up for No. 1 school land, NE cor. SE, Section 16-21-6 (corrected location.) The Magnolia Petroleum Corp. is rigged up on No. 2 Fox, NE cor. SE SE. Section 32-20-5; Marland Oil Co. and Mid-Continent Petroleum Corp.'s No. 2 Macbris, SW cor. SE NW, Section 33-20-5, is a rig; Shaffer Oil & Refining Co.'s No. 2 Platt, SW cor. NW SE, Section 15-20-6, timbers; Fern Oil Co.'s No. 3, NE cor. SW NW, Section 22-20-6, drilling at 850 feet. Minnehoma Oil Co.'s No. 3-A, NE cor. NW NW, Section 24-21-7, drilling at 500 feet. Prairie Oil & Gas Co.'s No. 2, NE cor. Section 23-20-7, drilling below 900 feet; Selby Oil & Gas Co.'s No. 8 Vaneman, SE cor. NW SE, Section 23-20-8, was drilling at 100 feet; No. 9 Van Eman, NE cor SW SE, Section 23, a rig; C. L. McMahon's No. 7, CWL NW SW, Section 24-20-8, spudded in.

**Lincoln County**

T. B. Slick's No. 1, SW cor. NE NW, Section 7-14-4, found sand at 3,305-10 feet. It swabbed 64 bbls. when water broke in from behind the casing. The Magnolia Petroleum Co.'s No. 4, SW cor. NE SE, Section 34-14-5, made 65 bbls. naturally from sand at 3,395-3,411 feet. It is a completion.

The Independent Oil & Gas Co.'s No. 2, NW cor. SW SW, Section 5-15-6, is good for 20 bbls. from sand at 3,775-84 feet, total depth 4,042 feet and plugged back. The Phillips Petroleum Co.'s No. 2, NE cor. NW SW, Section 8-15-6, which started off at 1,200 bbls. a day from sand at 4,080 83 feet, was later reported making 900 bbls. a day.

**Lincoln County Drilling**

The Magnolia Petroleum Co. has a rig up for No. 2 Kilgore, SW cor. NW SW, Section 8-15-6. The Phillips Petroleum Co.'s No. 3 Kilgore, NW cor. SW, Section 8-15-6, was drilling at 60 feet, and No. 4 Kilgore, SE cor. NW SW, Section 8-15-6, is rigging up.

The New England Oil Co.'s No. 2, SW cor. NW SE SW, Section 26-18-4, Payne County got a good well in the Layton sand at 1,961-71 feet. It made naturally a showing for a 250-bbl. well and was being cleaned out.

The Mulberry Oil Co.'s No. 4, NW cor. NE NW, Section 5-17-4, Payne County, was drilling at 990 feet; Roxana Petroleum Corp.'s No. 1, SW cor. NE NW, Section 31-17-4, drilling below 300 feet; Shaffer Oil & Refining Co.'s No. 1 Cook, SE cor. SW, Section 31-17-5, timbers.

**Southern Field Operations**

The Carter Oil Co.'s No. 3 Kimbrell, C SW NW SW, Section 22-2s-3w, Carter County, was drilling at 100 feet. McBride and others' No. 1 Goodwin, C NE NE SW, Section 2-1s-4w, Stephens County, is a rotary rig; Magnolia Petroleum Co.'s No. 8, SE cor. Section 25-1s-9w, cemented 8¼-inch casing at 1,950 feet and drilling; Pierce & Brown's No. 4, CWL NW SE, Section 27-1s-8w, rigging up rotary; Guy Brown Oil Co.'s No. 4 Voss, NE cor. NE SW, Section 28-1s-8w, rigged up; Commercial Oil Co.'s No. 11, C SW SE SW, Section 12-2s-8w, drilling below 1,200 feet.

The Pilgrim Oil Co.'s No. 10, C NW SW SE, Section 11-1n-3w, Garvin County, was drilling at 1,410 feet. The Carter Oil Co.'s No. 7 Derdeyn, SW cor. SE NW, Section 17-1n-3w, is pumping 65 bbls. a day from sand at 1,607-13 feet, and is building a rotary rig for No. 8, SW cor. SE SW NW, Section 17. The Mid-Continent Petroleum Corp.'s No. 3 Derdeyn, SW cor. NW SE, Section 17-1n-3w, is a 6-bbl. pumper from sand at 1,700-10 feet. The Magnolia Petroleum Co. has tools in for No. 1 Burr, C SE SE NW, Section 31-1n 3w. Fred Phillips is drilling below 300 feet in No. 1, SW cor. SE SW, Section 22-2n-4w, Stephens County, and the Magnolia Petroleum Co. is below 600 feet in No. 2, C NW NW SW, Section 32-1n-5w, Stephens County.

The Humble Oil & Refining Co. was drilling below 300 feet in No. 1 Olsen, NW cor. SE NW, Section 4-2s-3e, Murray County.

Cameron & Young's No. 1 Anderson, C NE SW SE, Section 33-1s-3w, Carter County, was drilling below 100 feet; Magnolia Petroleum Co.'s No. 2 Anderson, C SE NE SE, Section 33-1s-3w, set surface pipe; Gilmer Oil Co.'s No. 3 Hernstadt, C NW SW NE, Section 34-

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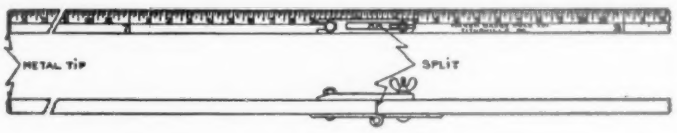


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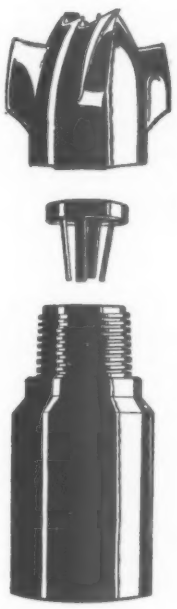

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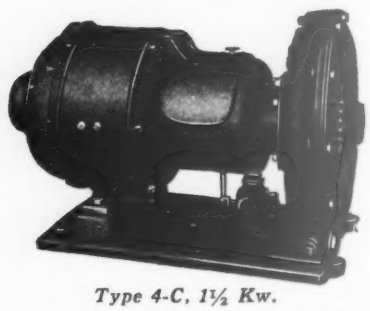

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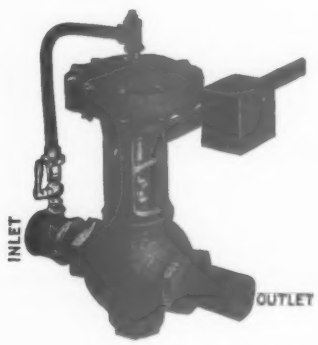


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1s-3w, sand at 3,054-59 feet, swabbed 40 bbls. a day, setting pipe, total depth 3,125 feet. Humble Oil & Refining Co.'s No. 1 McClish, C NW SW SW, Section 34-1s-3w, completed as a gas well, 10,000,000 feet initial production; No. 2 McClish, C SW SW SW, Section 34, rigged up rotary; No. 3 McClish, C NW SW SW, rig up for twin; Magnolia Petroleum Co.'s No. 6 McClish, C NW SE SW, Section 34-1s-3w, rotary rig; Simpson & Fell's No. 1 Galt, C SE SW NW, Section 34-1s-3w, swabbed 29 bbls. in 12 hours from sand at 3,195-3,260 feet, cleaning out; No. 2 Galt, C SW SW NW, Section 34, swabbed 60 bbls., and the hole caved in, sand at 3,047 feet; same company's No. 3 Galt, C NW SE NW, Section 34, drilling at 1,800 feet; Wirt Franklin's No. 5 Pruitt, C NW NW NW, Section 3-2s-3w, rotary rig; Magnolia Petroleum Co.'s No. 1 Adams, C NW NE SE, Section 3-2s-3w, timbers in; Humble Oil & Refining Co.'s No. 1 Johnson, C NE SW NE, Section 4-2s-3w, drilling at 1,240 feet; Wirt Franklin's No. 1 Grimes, C NW NW NE, Section 10-2s-3w, drilling at 1,450 feet; Magnolia Petroleum Co.'s No. 1 Morris, C NW NW NW, Section 22-2s-3w, timbers in; C. R. Smith's No. 1 Carpenter, C NE NW SW, Section 22-2s-3w, drilling at 400 feet.

The Magnolia Petroleum Co.'s No. 2 Cox, C NW NW SW, Section 15-2s-2w, 3,000,000-foot gas well at 1,004-19 feet.

The Humble Oil & Refining Co. has a rig up for No. 1 Pierce, NW cor. NW SW, Section 17-2s-2w.

### Stephens County Operations

The Magnolia Petroleum Co.'s No. 3 Harris, C SW NW NE, Section 3-2s-5w, Stephens County, is a 30-bbl. well at 2,490-2,500 feet, not completed. Same company has material in for No. 3 Harris, C SE NE NW, Section 3-2s-5w.

Hawks & Ware's No. 1 Nelson, C W half NW NW, Section 34-2s-7w, was dry and abandoned at 2,160 feet. A rotary is being rigged up for No. 1-A, a twin, on the same location.

The Magnolia Petroleum Co.'s No. 7 Russell, NW cor. SW SE SE, Section 25-1s-9w, Duncan district, pumped 50 bbls. a day from sand at 1,940-58 feet. The Empire Gas & Fuel Co.'s No. 33, NE cor. SW SW, Section 33-1s-8w, was estimated at 25 bbls. from sand at 1,650-82 feet. The Magnolia Petroleum Co.'s No. 16, C SE NW SW, Section 34-1s-8w, sand at 980-90 feet, 6,500,000 feet of gas. Pauline Oil Co. and Winkler's No. 1, NE cor. SW NE, Section 11-2s-9w, was dry and abandoned at 2,894 feet.

The Humble Oil & Refining Co. was cleaning out at 4,005 feet in No. 1 Barnes, C NW SW SE, Section 1-4s-3e, Carter County, an old well drilling deeper.

Brown and others in their No. 5, SW cor. NE NW, Section 33-6s-5w, Jefferson County, swabbed 180 bbls. a day from sand at 1,237-40 feet; well not completed.

Simpson & Fell's No. 1, C SE SW NW, Section 34-1s-3w, Carter County, got sand at 3,195-3,260 feet, and was drilling in shale at 3,265 feet and showing 70 bbls. a day. Gant and others' No. 1-A, SE cor. Section 35-1s-9w, Stephens County, was dry and abandoned at 3,008 feet. Winkler & McQueen's No. 1-A, SW cor. NE, Section 28-1s-8w, sand at 1,663-68 feet, pumping 78 bbls. Empire Gas & Fuel Co.'s No. 33, NE Co. SW SW, Section 33-1s-8w, sand at 1,650-52 feet, estimated at 25 bbls. Murchison & Fain's No. 1, NE cor. NW, Section 36-1s-8w, was dry and abandoned at 2,503 feet.

Jenson and others' No. 1-A, NW cor. SE NW, Section 9-5s-10w, Cotton County, was dry and abandoned at 2,000 feet.

The Pandem Petroleum Co.'s No. 1 Lesher, C NW NW SE, Section 8-5s-1w, Carter County, was abandoned as dry at 3,003 feet.

Amerada Petroleum Corp.'s No. 23 Baptiste, CNL NW NE, Section 20-5s-1e, got sand at 1,471-81 feet and started at 20 bbls.; No. 24 Baptiste, SE sor. SW SW NE, Section 20-5s-1e, sand at 1,461-65 feet and 1,509-28 feet, pumping 30 bbls; No. 27 Baptiste, NW cor. SE NE, Section 1,380-1,412 feet, pumping 60 bbls. Amerada Petroleum Corp.'s No. 14 Westheimer & Daube, SE cor. NW SE NW, Section 28-5s-1e, sand at 1,255-56 and 1,278-83 feet, pumping 30 bbls. Same company's No. 28 Baptiste, NE cor. NW NW SE,, Section 20-5s-1e, was drilling below 600 feet and its No. 15 Blow, NE cor. SE NW, Section 28-5s-1e, was drilling below 300 feet.

### Miscellaneous Operations

In Sequoyah County the Citizens Gas Co.'s No. 1 Hicks, NE cor. SW SW, Section 15-11n-26e, was drilling at 800 feet.

Denman & Flannagan have a rig up for No. 1 Barnard, SW cor. Section 6-27-3w, Grant County.

In the Oklahoma Panhandle the drilling report for the week shows the Valerius Oil & Gas Co.'s No. 1 Stonebreaker, NW cor. SW, Section 18-3-12, (Cimmaron meridian), drilling at 2,046 feet in red shale; Valerius Oil & Gas Co.'s No. 2 Hovey, SE cor. Section 32-5-12, drilling below 1,915 feet. H. F. Wilcox's No. 1 Xea, SW cor. SE, Section 28-3-13, fishing for tools, total depth 3,004 feet; same operator's No. 1 Hovey, SE cor. Section 21-4-14, fishing for bit, total depth, 3,032 feet; Foster, Reiter & Brann's No. 1 Kugle, SW cor. NE NE, Section 10-2-11, drilling at about 1,200 feet; Foster & Reiter's No. 1 Hurliman, SW cor. NE SW, Section 9-3-15, rebuilding rig; Home Development Co.'s No. 2 Allison, SE cor. NW, Section 4-1-12, rig up; Newson and others' No. 1 Allison, C SE SE SE, Section 4-1-12, fishing for bit at 1,070 feet.

In Caddo County the Gavin Drilling Co.'s No. 1 Stevenson, C NW NW NW, Section 2-4n-11w, was rigged up.

The Tidal Oil Co. is drilling below 2,200 feet in No. 1 Lowry, SW cor. SE SE SW, Section 12-19-1w, Payne County.

Briscoe & Hall's No. 1 Eates, C SE SE, Section 33-6n-9w, Caddo County, was drilling below 300 feet. Gorton Trust has a rig up for No. 5 Wagoner, NW cor. NE SE SW, Section 12-5n-9w.

In Grady County Stodgner and others were drilling below 800 feet in No. 3 Edmunson, SW cor. NW SW NW, Section 23-5-8w. The Oklahoma Crude Oil Co.'s No. 1, NW cor. NE NE, Section 27-5n-8w, cementing surface pipe.

In Garvin County the Carter Oil Co.'s No. 1 Horton, C NE NW SW, Section 8-3n-5w, was drilling below 500 feet; Magnolia Petroleum Co.'s No. 1 Mitchell, C NE NE NW, Section 34-3n-5w, drilling below 300 feet.

The Prairie Oil & Gas Co.'s No. 3 Dryden, C N half NE NE, Section 34-8w, Grady County, cemented surface pipe.

The Magnolia Petroleum Co. has a standard rig up for No. 1 Barnes, NW cor. NE, Section 10-3-10w, Caddo County

## WON PICNIC ON SALES

A picnic was given for the officers of the Butler Manufacturing Co. and the office employes and factory foremen of Kansas City, Mo., June 5, at Wildwood Lakes, Mo., owned by E. E. Norquist, vice president of the company and William C. Glover, manager of the gasoline purifying system department, (known as the Glover Sales Co.). Mr. Glover had bet his department it would not do $100,000 in business in April, promising a picnic if the business went over that amount. The entire company joined Mr. Glover and gave the picnic. C. C. Crouch, vice president and manager of the Minneapolis office, was there for the occasion.

## BUCKEYE PIPELINE CO.

At the annual meeting of the Buckeye Pipeline Co. at its Lima headquarters, D. S. Bushnell, T. B. Green, G. E. Pifer, T. C. Barnes and Gibson P. Dildine were elected to succeed themselves as directors. D. S. Bushnell was re-elected president, T. B. Green, vice president and general manager; W. F. Livingstone, treasurer, and J. R. Fast, secretary. A gradual increase in the company's business is said to be seen at the present time.

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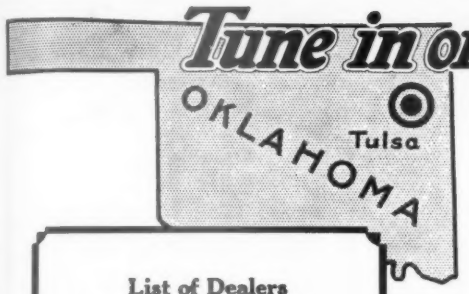


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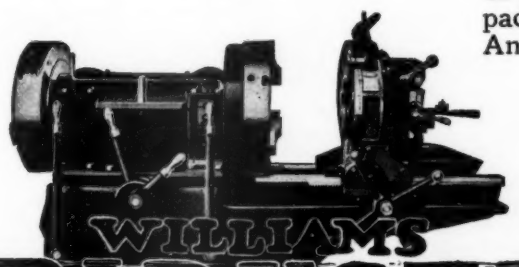

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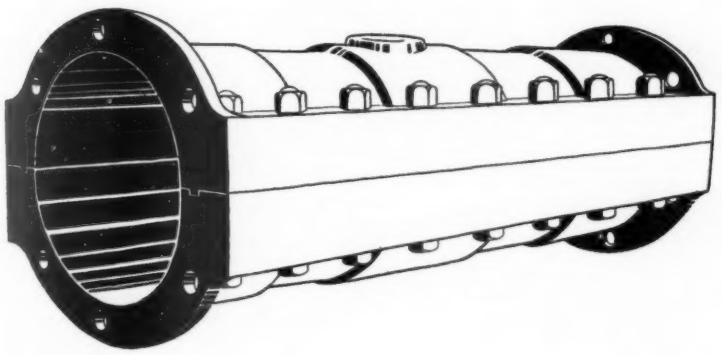

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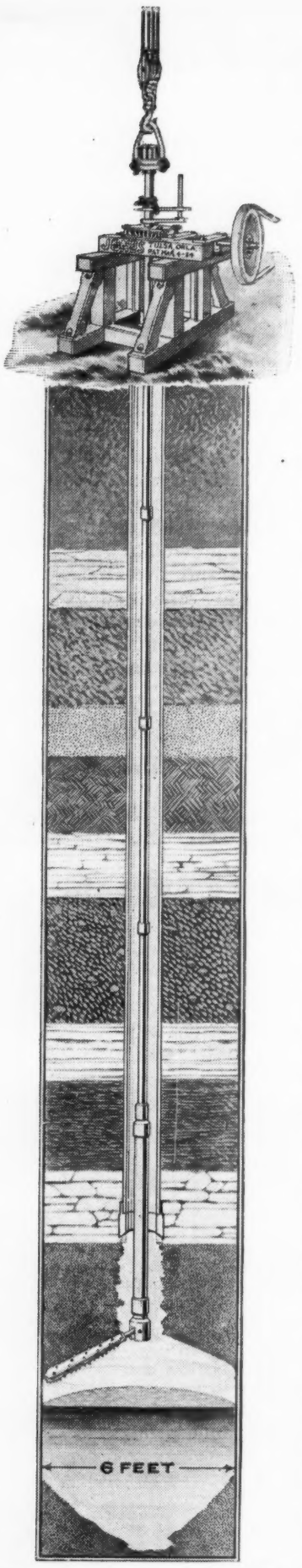


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## GULF COAST FIELDS

(Continued from Page 138)

045 feet. No. 8 is a location, and Nos. 11, 14 and 15 are derricks. Out northwest of production, Humphreys Corp.'s No. 1 Mick is at 4,165 feet. No. 1 Woodfine is below 2,690 feet. Bennett Production Co.'s No. 1 Woodfine is idle temporarily. Houston-Gulf Gas Co.'s No. 1 Woodfine is shut down at 1,010 feet. On the northeast side, Sun Oil Co.'s No. 1 Farmer is drilling around 1,155 feet.

**Liberty County Pools**

On the east side of the Hull Dome, the Republic Production-Houston Oil Co.'s joint No. 126 Dolbear is around 2,235 feet, and No. 127 is around 1,700 feet. No. 130 is at 2,010 feet, and No. 131 is at 1,675 feet. To the southeast on the Phoenix, Gulf Production Co.'s No. 11 Phoenix, is working over; No. 11 is deepening at 2,575 feet, and No. 19 is doing the same at 3,187 feet. No. 68 Phoenix, a new hole, is at 2,135 feet, and No. 69 is rigging, with a derrick up for No. 70. No. 18 J. C. Baldwin is rigging. A derrick is standing for 18 Hannah. Humble Oil & Refining Co.'s No. 22 Guedry is a derrick. No. 23 is drilling at 1,675 feet. No. 5 Merchant is a location. Derricks are up for Nos. 1 Lynn and 6 Marshall. The Texas Company's No. 1 Hannah is shut down at 3,890 feet. Texas-Vacuum joint No. 1 Hannah is at 996 feet, and No. 2 is below 3,110 feet. No. 10 Merchant is at 4,285 feet. Houston Production Co.'s No. 6 Palmer is at 2,640 feet in rock salt.

**Goose Creek Pool**

In the Goose Creek Pool, the Gulf Production Co.'s No. 8 State land is at 3,615 feet. No. 33 Beaumont is at 3,235 feet. A location has been made for No. 6 Hirsch. These three are in the bay. No. 12 Chapman-Bryan, near the mouth of the creek, is drilling around 2,780 feet. On the mainland, No. 7 Wright is at 3,765 feet, and No. 18 Smith will be deepened. Humble Oil & Refining Co.'s No. 68 Smith is drilling deeper at 4,465 feet, and No. 69 is rigging up. No. 12 Peninsula is at 2,375 feet and No. 17 is a derrick. Sun Oil Co. is rigging No. 6 Wright to work over. Powell Oil Co.'s No. 6 Bryan is deepening at 2,775 feet, and the M. & B. Oil Co.'s No. 4 Scorrgea, northwest of production, is around 4,235 feet.

At Pierce Junction, the Rio Bravo Oil Co.'s No. 2 P. F. Settegast set casing at 3,790 feet to test 20 feet of sand between 3,880-3,900 feet. It is on the west side of the dome. A derrick is up for No. 3 Settegast, and a location for No. 4. One of these will be drilled with an electric rotary. On the east side, Gulf Production Co.'s No. 18 Taylor is at 3,154 feet. Navarro Oil Co.'s No. 3 Cain is at 565 feet.

**Fort Bend County Pools**

At Big Creek, Gulf Production Co.'s No. 29 Davis is drilling around 3,675 feet. No. 11 Wheat is at 3,010 feet.

Around the Nash Dome, Rycade Petroleum Corp. abandoned No. 2 Flessner at 4,071 feet. No. 3 Flessner is in a water sand at 4,043 feet. No. 7 Nash is at 845 feet, and No. 8 Nash is below 600 feet. A derrick is up for No. 9 Nash.

Gulf Co.'s No. 11 Davis, at Long Point, is in cap rock around 785 feet.

**Other Pools**

Sun Oil Co. is preparing to test No. 10 Cade at High Island, Galveston County, at 3,440 feet. The bit went into 17 feet of sand. No. 8 Cade is around 3,870 feet. Gulf Production Co.'s No. 5 Smith is drilling deeper below 3,810 feet, with a location made for No. 2-A Smith. Paggi Brothers' No. 1 Jackson is drilling around 900 feet.

In the West Columbia Pool, The Texas Company is preparing to drill No. 4 Abrams on the north side, deeper.

At Blue Ridge, Gulf Production Co.'s No. 7-B Blakely is around 2,900 feet, and No. 3 Invincible is deepening at 2,890 feet. Blue Ridge Oil & Gas Co. has made a location for No. 1 Robinson on the west side of the dome. Abercrombie Co.'s No. 1 West-Schenck, on the south side, is deepening around 2,925 feet.

In the Sour Lake Pool, Lake View Oil Co.'s No. 48 Hardin is at 980 feet. J. F. Bashara is rigging No. 1 fee. Orange Petroleum Co. has made a location for No. 1 Merchant. In the deep sand section, Yount-Lee Oil Co.'s No. 4 Gilbert is below 3,875 feet, and No. 1 Lynn at 3,135 feet. Falloure and Herbert's No. 3 Jackson is deepening. Humphreys Corp.'s No. 2-A Bashara is rigging, and No. 1-B Bashara is a derrick. Sun Oil Co. is setting casing in No. 1 Libbie at 4,075 feet.

**South Louisiana Pools**

In the Vinton Pool, Gulf Refining Co.'s No. 4 Gray is drilling around 3,775 feet, and No. 39 Staris at 1,785 feet. No. 42 G. N. G. is being drilled deeper. The Texas Company's No. 15 Gray is at 1,985 feet. Supreme Oil Co.'s No. 1 Gray is around 1,135 feet. Vinton Petroleum Co.'s No. 20 Rescue is drilling at 2,034 feet. No. 15 Harmony is below 2,345 feet, and No. 28 Gray is around 2,375 feet. Vinton Oil Syndicate's No. 2 Johnson is sidetracking at 1,855 feet. Pelican Oil Co.'s No. 2 Lyons is fishing. Marrs McLean's No. 11 Gray is rigging.

In the Edgerly Pool, Rex Oil Co.'s No. 3 Hunter is rigging. W. B. Deysdale will deepen No. 2 Hill, and Gulf Refining Co. will deepen No. 25 Bright-Penn.

At Lockport, Calcasieu Parish, the Vacuum-Gulf joint No. 7 Miller is sidetracking at 3,870 feet, and No. 8 is fishing at 3,865 feet. No. 10 Miller is at 3,080 feet, and No. 11 is below 1,435 feet. No. 1 Friedberg & Wolf is deepening at 5,175 feet. No. 3 Farquhar is around 4,375 feet, and No. 4 Lock-Moore is at 4,235 feet, with a location for No. 3 Bordages.

**Miscellaneous**

Runs of the Magnolia Pipe Line Co. from the Luling Field during May were 106,697.13 bbls. From the Lockhart Field, 99,607 bbls., and from the Mirando Field, 217,702.20 bbls.

**Coastal Wildcats**

In Austin County, the Valley Oil Co. (Pennington and others') No. 1 Thompson is showing gas at 180 feet.

In Brazoria County, Roxana Petroleum Corp.'s No. 1 Cooper is at 535 feet, and No. 2 Cooper is around 1,235 feet. No. 2 Allen is at 4,125 feet.

In Hardin County, Weldon Oil Co. quit No. 1 Kountz, near Batson, at 1,100 feet. Humble Oil & Refining Co.'s No. 2 Weiss is fishing at 2,670 feet. Pine Oil Co.'s No. 1 Fullbright is idle.

In Harris County, Benedum & Trees' No. 1 Kennedy has started drilling. Kelly and others' No. 1 Lipper is rigging near Aldine. Kane Production Co.'s No. 3 Foster is at 1,610 feet.

The Texas Company's No. 1 Old River, Chambers County, is drilling around 1,100 feet.

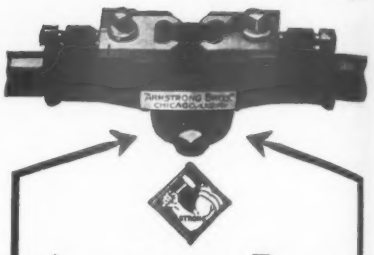
In Jefferson County, Gulf Production Co.'s No. 7 Thomas, at Fannette Dome, is around 1,135 feet, and No. 2 Bordages there is at 3,500 feet. Houston Oil Co.'s No. 1 Pipkin-Davis is at 2,910 feet, with a location for No. 2 Sun-Dyson. These are at Big Hill Dome. Port Arthur Development Co.'s No. 3 West is around 2,385 feet.

In Matagorda County, Gulf Production Co.'s No. 1 Parkinson, Hawkinson Dome, is rigging. No. 1 Sanborn is drilling around 2,545 feet, and No. 4 Craig is idle at 3,300 feet. Same company has a location for No. 1 Turner, near Van Vleck, and Humble Oil & Refining Co. is rigging No. 1 Robbins. Shepherd Mott Oil Co.'s No. 2 Hawkins is around 3,155 feet. Rycade Corp. is rigging No. 2 Kountz on the south side of the Markham Pool. Houston-Gulf Gas Co. is drilling two gas wells there.

In Newton County, Humble Oil & Refining Co.'s No. 1 Sabine Tram is around 4,100 feet.

Yount-Lee Oil Co. has started No. 15 Ervine, a formation test in Jeff Davis Parish, Louisiana.

In the Humble Pool, F. M. Long is working over old holes on the northwest side. Sun Oil Co. is drilling No. 33 River there. H. & W. Oil Co.'s No. 3 Bailey is drilling as is the Cardinal Oil Co.'s No. 2, and George L. Harris' No. 3 Bering. A. L. Fondern is drilling No. 4 Mason. Brane Oil Co. is drilling No. 5 Perkins. Several old wells are being worked over in various parts of the pool.



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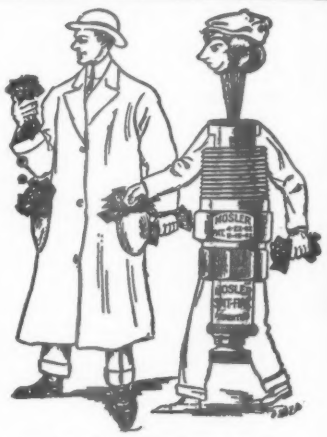

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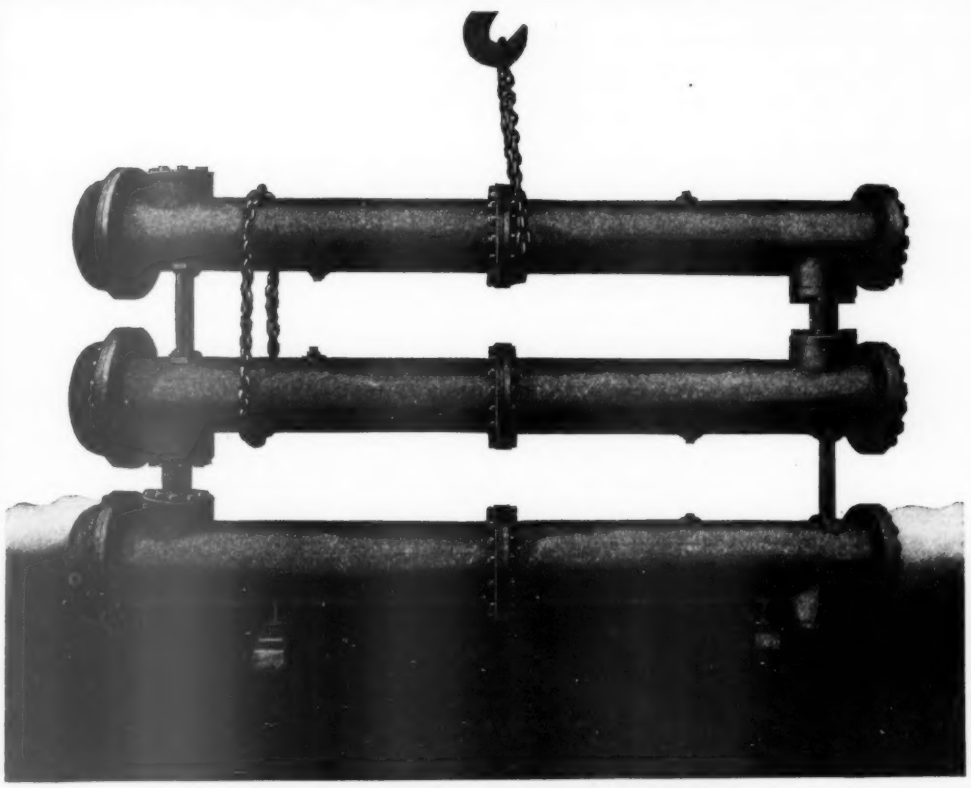

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MINES FOR SALE—If you are looking for some valuable mining property, write me. Etienne A. Ritter, 408-9 Empire Building, Denver, Colo.

### WANTED

MONEY WANTED to drill oil wells on our own approved structures. Will give one-half undivided interest. Retrieve Oil Corp., P. O. Box 385, Houston, Tex.

WANTED
Second Hand
Small absorption plant for extracting natural gasoline from 350,000 cubic feet each 24 hours.
Must be modern equipment. State lowest price and give list of items. Box B-347, The Oil and Gas Journal, Tulsa, Okla.

WHO WANTS to open up an oil field near Conroe, Tex., between Humble and Mexia? W. H. McDade, Conroe, Tex.

OIL MAN, with several quick drilling deals, wants partner with money. 606½ North Ewing St., Dallas, Tex.

WE HAVE 4,000-acre block of leases, Madison County, Texas. Can show oil standing in two unfinished wells on this block. We want capital to finance well. Lowry and Kyle, Anthony Hotel, Brenham, Tex.

WILL BUY natural gas plant, up to 1,000 consumers. Box B-331, The Oil and Gas Journal, Tulsa, Okla.

WANTED—Three or four cylinder rigs, preferably equipped with drill stem and make and break or double deck rotaries. Would like to locate Shell Goodwin, Shelly White, Frank Baquett, Jesse Reese, Puss Adams or Lew Williams. Will receive mail during June at Burkburnett, Tex., or at Box 72, Pasadena, Calif. D. O. Credille.

WANTED—Producing royalties Oklahoma and Kansas. Give full details. P. O. Box 502. Independence, Kans.

### FOR SALE—DOGS

HUNDRED hunting hounds cheap. Buy early. Catalogue. Kaskaskia Kennels, Herrick, Ill.

XUM

# Chicago Consumption Not as Expected

## String of Moderate-Sized Orders, Bulks Large in Totals. Looking For the Touring Season to Improve Situation

By J. B. Waldo

CHICAGO, June 12.—The Eucharistic Congress which convenes in this city on June 20, is expected to attract upwards of a million visitors for the five days it is to be in session. There will be many meetings at widely separated localities in the city and suburbs while the most important ceremonies will take place at the seminary town of Mundelein about 30 miles from Chicago. There will be a great deal of transportation required and there is every reason to expect a large local consumption of gasoline.

Dealers are already preparing for it. Many have filled their storage and those with limited tankage who are along the lines of indicated large traffic or close to centers of activities, will have some sort of a reserve for it is doubtful if the railroads will be able to do more than care for the increased passenger traffic. Extra tank cars will be placed by some late next week on their sidings and those who have no tracks available are planning to have their trucks assembled at the stations where the demand will be largest, each filled to the brim with gasoline so that if the rush is very great sales can be made direct from the tankwagon.

Generally distributors report consumption has not been as good as was hoped for since Memorial Day, a fact that is generally blamed on the weather. In fact there has been quite a bit of comment among oil men regarding the few cars seen on the roads around Chicago.

### Moderate Sales Bulk Well

It is the thought of improved business to come that has given strength to the market for the demand during the week has been less than expected and prepared for, although sales have bulked fairly large when totaled. There has been little large business, just a string of moderate orders with the usual withdrawals on contracts. Stocks in jobbers' hands are reported by the jobbers and in some cases by salesmen who have been out in the country districts to be quite adequate, in most cases equal to a couple of weeks' requirements at the present consumption. The visiting representatives of the refiners' sales organizations also state that the distributors seem indifferent to offers of any special concessions as to price saying they would buy when they needed the gas and pay the market, but of course the travelers also state that the jobbers believe the peak of the season has been reached while refiners claim the present week's prices have been as low as will be seen for the remainder of the summer. This is merely an expression of the usual different outlooks of buyer and seller.

The demand has been very largely for the Navy grade and the price has been mostly at 11¾ cents with some holding for 12 cents, but if they could get it, there were few cases in which an order at 11¾ cents was refused. There has also been some selling between marketers at 11½ cents and a little to the trade at that price, although the quantity sold has not been large, and much of it distress stuff that had been ordered out in expectation of a larger demand after the opening of the month. There is also some doubt regarding the exact specifications of this 11½-cent gasoline, for there are so many grades now, such as the 56-58 Navy and the 58-60 450, that the exact specifications are sometimes explanatory of the apparently low price. When correctly quoted these gradings usually sell at one-fourth cent less than the price of Navy. There has been a continuance of the weakness in the higher tests that developed last week to such an extent that the refiners were characterized as panicky by some local marketers, who could not otherwise explain the low prices. It has been possible to buy 60-62 440 at 12 cents, and the 64-66 375 at 12¼ cents during the week, first out of north Texas but later from the Group. Natural gasoline has also ruled lower, due it is explained, to the dumping of supplies by north Texas producers.

### Special Gasolines

There is still much surmising regarding the effect on the market and even on the industry, of the putting out of the cracked gasoline from certain refining processes, at prices so close to the price of the regular grades sold at the regular station price as quoted by the Standard organization. The Texas Company is well pleased, apparently, with the reception given its new product and seems to be having some difficulty in keeping distributors supplied as some have been in the market for additional supplies claiming they were short of their requirements. The Sinclair organization is about to put out an antiknock product for which it makes great claims. The Barnsdall Corp. has an antiknock product and Marland is shipping some to his stations but has not made any special mention of it. The Standard has advertised its ethyl gasoline extensively in this city, the station price being 3 cents above that of Red Crown gasoline. There is also considerable difference of opinion among users regarding the merit of the new product, not they say that it is not a good gasoline but they contend in some instances they do not get as much mileage as with the regular Navy gasoline. Some claim a leaner mixture should be used with this gasoline than with the Navy. There are many drivers who are very favorable to the new product and judging from the fact that Texas dealers in this locality have not been kept fully supplied, it would seem the demand must have been very good. There is a possibility that the local garage man is also not favorably inclined to The Texas Company product as it is not so profitable to handle as the grades sold under the regular terms and bearing the Q. D. A. prices. From the present tankwagon price there is the quantity discount of 1 cent a gallon and the Q. D. A. of 2 cents a gallon if the amount purchased is large enough and a further allowance if the garage man has his own tank to send for the gasoline. Just how much these discounts amount to is a debatable question according to the independent dealer, but it is easy to figure that a garage man with a good trade will not pay more than 15 cents at most for regular gasoline under the present tankwagon scale in Chicago. Any refiner who did not give a similar discount would naturally be less favored by the garage sellers of gasoline, who would naturally try to indue their customers to use the product on which there was the widest margin, the quality being satisfactory. Many motorists claim they secure best results from the use of their regular grade of gas. Right now The Texas Company and the Standard are pushing their products through page ads in the daily papers. Sinclair will use advertising space liberally to announce its new product and we may see a merry war in the newspapers over the merits of the various special gasolines, although consumers have been well satisfied with the former products but, of course, willing to have something better if it is to be had and not too expensive.

### Kerosene Demand Light

There is little doing in kerosene and little more to be said. The demand is very light and prices have drifted downward during the week and at the close it was possible to buy from refiners for resale at 8½ cents Group 3, with the trade quoted as low as 8¾ cents, although some refiners were holding to 9 cents and one to 9¼ cents. There is very little demand, a few cars at most but there is hope that early in July the tractors will be once more in need of fuel and a better demand prevail. Some distributors overordered partly because they failed to receive shipments promptly and ordered again and have considerable kerosene in their tanks.

### Furnace Oil Contracts

Furnace oil is being debated from all angles but so far refiners are not making prices except for spot delivery and the distributors are finding it very dull waiting and rather an anxious time as well. Contracts have been prepared by the leading distributors which provide for the consumers' requirements, the price to be the regular tankwagon price at date of delivery. This is at present, so far as this city is concerned, 9½ cents for light distillate. Manufacturers of oil burners have held meetings and while they show a desire to stick together, those whose burners are not so particular regarding the quality of the oil, its flash and gravity, are less worried than those who must have a high grade distillate. The outlook is very unsettled. Asked why a consumer should sign such a contract as will be offered, an executive of a leading oil company stated it would be for his protection for really he did not see where a sufficient supply of furnace oil was to come from. This referred more particularly to the owners of burners of the type that requires a low flash and intimated that if there was a shortage those with contracts would be the ones that would have the right to the available supply. The price of furnace oil cannot be advanced too much or too rapidly without working some inconvenience if not hardship and probably would result in public protests. The refiner considers that he should secure as much of the most valuable product from his crude as possible and to get all the gasoline that present refining methods will permit, he must crack the very cuts that have been the backbone of the domestic oil burner industry. This does not necessarily mean that furnace oil will be expected to sell at a price comparable with gasoline but that the supply will be so greatly lessened there will be active competition for what is available and the extent of this demand will depend very largely on the winter. The present demand is light, an occasional car, but there is some movement. The offerings of distillates have been somewhat larger. One of the larger refining organizations has been offering a considerable quantity of 38-40 straw distillate at 4½ cents. It wanted to sell this to be shipped at the rate of a car a day and the quantity would take over a month to ship at this rate. Occasional lots of distillate of various specifications are offered at very close to this price. Many of the best sources of supply last season have nothing to offer right now as they are cracking the stock. I cannot find that refiners are making any progress on their plan to make contracts with distributors for quantities to be priced at the market date of shipment. This is too uncertain for the distributor. One of the greatest troubles in the situation is that too much has been said in the past in selling the oil burner of its low cost of operation and too little regarding the great merits of the method of heating. Right now salesmen (?) are calling on prospective buyers and basing their sales talk on the fact that all this added convenience, health and comfort will cost them no more than coal. Very recently a director of the Standard Oil Co. was called on by an oil burner salesman who assured him that he could make a contract right now for next winter's supply of oil at 8½ cents. The salesman did not know to whom he was talking.

Gas oil continues to show very little change. The demand from the industries is just about what is expected for the season. There is little if any buying by distributors for next winter for use as furnace oil although there is some inquiry and it is possible that some of the cars ordered are not for immediate requirements. There are numerous small industries who use more or less gas oil in tankwagon lots right along during the summer but their requirements are not so large as when the weather is colder so that the tankwagon distributors are having a very quiet month as a rule. Prices are fairly steady but it is noticed by some of the car lot buyers it is possible to buy the uncracked gas oil if needed which seems to indicate either a larger supply or a smaller demand with some of the refineries. Many quote 4 cents for gas oil but occasionally a special quality or desired car is moved at a little higher price. Probably the limit for a straightrun light oil today would be 4½ cents if available and some dark gas oil has been sold at 3⅞ cents during the week to the trade.

### Fuel Oil Drags

Fuel oils continue to drag along with only the usual summer demand and a little larger offerings. There is a lot of trouble in the fuel oil business right now. Buyers are striving to lower their costs and take advantage of technicalities. One buyer whose specifications called for a certain grade of oil was supplied with a few cars of higher gravity in order to make the delivery date as specified. He has promptly entered a complaint and asks for a credit of a little more than 6 cents a barrel on the theory that the oil did not contain as many B.t.u.'s as the regular grade. He not only had to burn a little more oil to produce the same quantity of heat but he had to pay the freight on a greater weight of nonheat producing parts of the oil. This is not the first time that this sort of a claim has been made but it is not so common as to make the claim lack all elements of novelty. With almost no exception, buyers are continuing their practice of holding back their business as much as possible and reducing their purchases to the least quantity they can make do. The consequence is they want very prompt deliveries and frequent hurry-up orders are common. Prices show very little change. There is a considerable quantity of low gravity but free flowing oil coming out of the Sinclair plant and they have booked considerable business with manufacturers whose equipment will permit them to use the grade of oil. It is noticeable that many plants are using a lower gravity of oil than they have in the past. Some are doing this unwittingly being shipped a grade lower than their specifications. Some who have always insisted they must have a 24-26 oil on being told this was unobtainable for a time, have accepted and been able to use a gravity as low as an 18-20 without trouble and this can be done if the oil is free flowing as are many of the low gravity cracked fuel oils. It may necessitatte a more frequent cleaning of the filters and changing of burner tips but the difference in price and the hotter flame should still leave the user a balance after paying

for the expense of cleaning filters and burners. The offerings have been a little more free. The 26-30 gravity has been quite freely offered and the price is about on a level with the 24-26 grade which is with many buyers a sort of standard due to old-time custom.

Smackover fuel oil is moving fairly well. Some sellers are handing a considerable volume while others are finding the demand moderate. The price is steady at $1.20 as an average. Some small sales are reported to have gone through at $1.17½ and one of the most active of the distributors of this oil is selling at $1.22½ having a good line of contracts at present to fill.

The road oil business is getting quite brisk and as several of the regular sources of supply sold up early in the season and others have not made any quantity this year, the larger refiners with their special departments to handle this business are getting the bulk of the orders. The Standard Oil Co. quotes the regular grade specified in contracts in Illinois at 5¾ cents in tank cars f.o.b. Whiting, Wood River or Sugar Creek. Some Smackover road oil was picked up during the week from marketers at $1.30 per barrel. Several of the local refiners and marketers who formerly bid on these contracts do not do so at present but quote their customers at the county seats. These local dealers usually have a better acquaintance with the officials placing the order and can handle the business with less friction so that the number of local concerns who are directly interested in the bids for contracts is greatly less.

### Lubs Firm

Lubricating oils are firm in price and the demand is quite active although the station sales are, like gasoline, not so good as hoped for and expected to be later. The industrial demand bulks large but is eagerly sought by many sellers. There has been no change of any importance, is the local report. Refiners state that they are still sold ahead on motor oils.

### Tankwagon Rumors

There has been a lot of rumor regarding an advance in gasoline tankwagon during the week, but so far as can be learned there is nothing back of the reports, except the desire for a more active business and a more settled price situation. Just how a tankwagon advance would cause these is a question but it might permit some of the owners of gasoline for June delivery to increase their sales although this is problematical. A very general opinion has been that there would be another advance of 1 cent provided there was the bulk of business back of the advance to maintain it. Right now this condition can hardly be said to prevail. The bids submitted to the post office for the quarter beginning July 1 show there is an impression there will be an advance of 1 cent, for while the first month is based on the present market later months show an advance of 1 cent a gallon in most bids. The Standard's bid, however, is for the same maximum of 15 cents right through the quarter which might mean that it did not expect an advance but it also might mean that it wanted this contract for reasons of their own. The price situation over the territory is good, there being a minimum of price cutting, only a weak spot here and there. Jobbers report sales in excess of last year with very few and unimportant exceptions. Local distributors of fuel oils in tankwagons are having a quiet trade but usually at this time they have some contracts for supplies and are making season contracts with their regular customers. Generally the situation is quiet with the jobbers who are doing a steady and profitable business and expect it will be much better the latter part of this month.

# EAST BUYING IN CALIFORNIA; MARKET SHOWING IMPROVEMENT

By N. O. Fanning

*New York Bureau, The Oil and Gas Journal, Room 543, 30 Church St., New York*

NEW YORK, June 12. — The refined oil markets showed some improvement during the past week, due to much better weather conditions, coupled with a revival of industrial activity in some directions. On the whole the outlook is for the maintenance of current price levels, with advances in some directions.

Diesel oil and gas oil were advanced during the week, the former 8½ cents a barrel to $2.50 and the latter ¼ cent a gallon to 6¾. Refiners and marketers are predicting 7-cent gas oil in the near future.

The gasoline market is puzzling some observers, due to an irregular trend in prices in various parts of the country. With prices on the Atlantic Coast holding firm, the Mid-Continent market is soft, due principally to lack of active buying. The explanation advanced in some quarters is that large refiners are supplying all their current needs without having to buy in the open market, due to the prevailing cool weather until now. In addition, jobbers are less active and are disposed not to bid up prices.

The difficulty in looking ahead lies in the uncertainty with regard to consumption. If this has increased so far this year in as gratifying a manner as reports indicate, a record summer demand may be looked for, due to the advent of hot weather, which may impart a strong tone to the market. All depends on consumption.

Few refiners will say there is a shortage of gasoline at the present time, nor is there likely to be, barring unusually hot weather this summer. The trend of weather conditions this year seems to be toward unseasonal coolness.

On the other hand, stocks are in strong hands, and production is being held within what many believe to be reasonable bounds.

It is reported that new contracts have been made by Atlantic Coast refiners for the purchase of California gasoline. This presages an increased coast-to-coast movement, and less likelihood of heavy purchases in the Mid-Continent Field.

### Kerosene

The kerosene market is dull, but prices are holding well, due to lack of offerings.

### Gas and Fuel Oil

The strength in gas oil, bringing about a high record price for the past few years, is due to the increase in cracking operations, although there is a steady increase in industrial consumption.

Diesel oil is also strong. Just what the marvelous gain in the use of this product will mean to the oil business cannot yet be foreseen. An increasing percentage of new ship construction consists of motorships with Diesel propulsion. The consumption of Diesel oil will ultimately outstrip that of bunker fuel oil by a wide margin, in the opinion of experts. Use of bunker oil, on the other hand, is likely to decline somewhat.

Diesel oil brings a better return to the oil business than bunker oil, so that the increase in profits from this source may be an important influence on gasoline quotations, the policy of the oil refiners being to keep gasoline, so far as is equitable with good business, within bounds.

### Lubricants

Lubricating oils are in better demand, especially cylinder stocks, bright stock and white neutral. Jobbers report a better demand with less tendency toward price discrimination on the part of consumers.

Paraffin wax is also firm.

### Petrolatum

A firmer tendency in the price of dark green petrolatum will, it is believed, ultimately result in a recovery in other grades from their present low price levels. Demand is somewhat under expectations as yet, however, and refiners are not anxious to limit sales by holding out for higher prices.

### Export Market

The chief feature of the New York oil export market has been a falling off in bulk kerosene shipments, which may pressage a downward tendency in prices, according to some exporters. The decline in shipments has affected those to Europe, principally, and is in part seasonal. The question is whether the current high export quotations can be maintained over the summer months.

Local export factors are somewhat worried over developments in France, where a curtailment of automobile or gasoline imports may be enforced in the near future. This situation is a result of financial conditions in France, and some exporters believe this is typical of the present outlook in Europe, where both financial and political conditions are not the best that could be desired.

On the other hand, consumption abroad is gaining due to the growing use of the small car, and this may offset in some countries the adverse effect of curtailment in others.

The best features of the export market has been the continued favorable shipments of gasoline, lubricating oil and paraffin wax. Trade with the Orient is especially good.

Exports of paraffin wax for the week ended June 9 amounted to 3,650,450 pounds, compared with 921,445 pounds the week ended June 2, and 4,402,290 pounds during the week ended May 26.

The local export price situation as to gasoline is favorable, but it is reported Gulf exporters are shading a little, which may ultimately be reflected here.

The following table shows principal exports of petroleum and petroleum products from New York reported during the past three weeks (figures in gallons unless otherwise noted in parentheses):

| | Week Ended | | |
|---|---|---|---|
| Gasoline: | June 9 | June 2 | May 26 |
| Bulk | ..... | 5,470,676 | ..... |
| Cases | 2,256,140 | 1,894,110 | 538,110 |
| Kerosene: | | | |
| Bulk | 806,377 | 1,210,224 | ..... |
| Cases | 2,795,450 | 1,000,300 | 2,030,910 |
| Gas oil: | | | |
| Bulk | 746,638 | 353,506 | ..... |
| Lubricating oil: | | | |
| Bulk | ..... | 1,990,678 | ..... |
| Barrels | 1,345,350 | 1,147,550 | 1,751,600 |
| Cases | 287,770 | 172,550 | 372,990 |
| Lubricating grease: | | | |
| Barrels (lbs.) | 740,250 | ..... | ..... |
| Paraffin wax: | | | |
| Bags (lbs.) | 2,748,900 | 768,020 | 3,647,040 |
| Barrels (lbs.) | 901,550 | 153,425 | 755,250 |
| Petroleum asphalt: | | | |
| Barrels (lbs.) | ..... | 3,260,700 | 1,263,975 |
| Crude oil: | | | |
| Barrels | 67,250 | ..... | ..... |

The foregoing shipments include lots of 500 bbls., 1,000 cases, or more.

### Tanker Charters Active

The tanker charter market shows renewed activity in all departments. There has been a sharp increase in rates in some directions. The tanker Francis E. Powell was chartered for the California-Atlantic Coast route at $1 a barrel, to carry gasoline, July loading. This is the highest rate charged since 1920, when tankers brought as high as $1.20 a barrel. It compares with rate of 85 cents charged a month ago.

Recent fixtures, aside from that mentioned, were as follows:

Tanker Dixiano (Am.), 2,613 tons net, Gulf to north of Hatteras, 32 cents, crude oil, June loading.

Tanker Tuxpanoil (Am.), 4,398 tons net, Gulf to north of Hatteras, 32 cents, heavy crude, June loading.

Tanker Rudolph Albrecht (Ger.), 1,612 tons net, Gulf to United Kingdom-Continent, lubricating oil, 31s. per ton, June loading.

Tanker Massis (Fr.), 3,062 ton net, clean, Gulf to French Atlantic, 27s. 6d., July loading.

Tanker Sjomand (Nor.), 3,500 tons, gasoline or kerosene, Batoum to Alexandria, 13s. 6d., eight trips, August loading.

Tanker City of Freeport (Am.), 2,628 tons net, lubricating oil, north Atlantic or Gulf to Rio de Janeiro, 36s. 6d., July-August loading.

### Oil Receipts Increase

Estimated receipts of crude and refined oil at Atlantic Coast ports for the week ended June 9 were 4,602,000 bbls., a daily average of 657,000 bbls., compared with 3,386,000 bbls., or 483,000 bbls., for the week ended June 2.

The feature was a marked gain in receipts from the Pacific Coast, which are estimated at 813,000 bbls. for the week ended June 9. This compares with 388,000 bbls. the preceding week. The daily average of 116,000 bbls. for the week ended June 9 compares with 55,000 for the preceding week.

Receipts from the Gulf Coast increased to 2,726,000 bbls., a daily average of 389,000 bbls., while imports totaled 1,063,000 bbls., or 152,000 bbls. daily.

Imports included 864,000 bbls. from Mexico, a daily average of 123,000 bbls., and 199,000 bbls. from South America, a daily average of 29,000 bbls.

The following table shows estimated daily average receipts of crude and refined oil by water at Atlantic Coast ports from the Gulf and Pacific Coasts of the United States, and imports, for the last three weeks; also monthly record for the last 12 months (figures in barrels):

| | Week Ended | | |
|---|---|---|---|
| | June 9 | June 2 | May 26 |
| Gulf | 389,000 | 280,000 | 370,000 |
| Pacific | 116,000 | 55,000 | 61,000 |
| Imports | 152,000 | 148,000 | 176,000 |
| Total | 657,000 | 483,000 | 607,000 |

**Daily Averages by Months**

| | Gulf | Pacific | Imports | Total |
|---|---|---|---|---|
| 1926: | | | | |
| May | 318,000 | 66,000 | 139,000 | 523,000 |
| April | 326,000 | 92,000 | 146,000 | 564,000 |
| March | 317,000 | 97,000 | 178,000 | 592,000 |
| February | 332,000 | 73,000 | 122,000 | 527,000 |
| January | 279,000 | 59,000 | 96,000 | 434,000 |
| 1925: | | | | |
| December | 298,000 | 56,000 | 103,000 | 457,000 |
| November | 259,000 | 36,000 | 92,000 | 387,000 |
| October | 249,000 | 36,000 | 102,000 | 387,000 |
| September | 306,000 | 66,000 | 76,000 | 448,000 |
| August | 291,000 | 54,000 | 90,000 | 435,000 |
| July | 391,000 | 63,000 | 107,000 | 561,000 |
| June | 379,000 | 66,000 | 118,000 | 563,000 |

The foregoing estimates are based on the carrying capacity of incoming oil-laden tankers.

## Million Dollar Gift By Edgar B. Davis, Luling Field Finder

LULING, Tex., June 12.—Establishment of a million dollar foundation for founding a home for destitute children of Texas and founding an institution for promotion of crop diversification was announced by Edgar B. Davis, father of the Luling oil field, president of the United North and South Oil Co., in a speech here.

Mr. Davis did not elaborate on the statement, merely saying he had established the fund for founding and maintaining the two projects.

The home for destitute children will be open to children from all parts of the State, but will be maintained especially for destitute children of Caldwell and Guadalupe counties.

### E. J. SADLER HONORED

NEW YORK, June 12.—The Standard Oil Co. of New Jersey added another large tanker to its fleet when it named the E. J. Sadler at the Staten Island yards. Miss Elizabeth Sadler, youngest daughter of Mr. Sadler, acted as sponsor. Mr. Sadler was thus honored because of his service to the Standard Oil Co. in connection with its various foreign enterprises. He is now the company's director in charge of the foreign producing properties.

### JOINS ROYAL DUTCH STAFF

LOS ANGELES, Calif., June 12—R. R. Templeton, who was primarily responsible for the starting and construction of the Union Oil Co.'s conservation work, has severed his connection with that company to become technical adviser and assistant to William C. McDuffie. Mr. Templeton will for the present do a considerable amount of traveling and probably cover all holdings of the Royal Dutch interests before establisbing permanent headquarters.

XUM

# Carbon Deposit and Gasoline Quality

## Experiments Show Little Difference in Gasolines Meeting Commercial Specifications. Temperature and Type of Lubricating Oils Important

*By S. P. Marley, C. J. Livingston and W. A. Gruse
*Mellon Institute of Industrial Research*

This paper presents an experimental study of the three factors believed to be important in the formation of carbonaceous deposits in internal combustion engines. The method of holding all operating conditions constant except the one under study has been adopted. Thus, head temperature, fuel and lubricant were varied in turn, and the results observed. Previous studies on carbon deposits have been published by Orelup and Lee and by Brooks. These investigators, to accelerate the formation of deposits, adopted the device of mixing a small percentage of lubricating oil with the fuel. It may be noted that they encountered great difficulty in duplicating results. We have adopted the other alternative of controlling very closely the operation of a specially designed, single-cylinder test engine and allowing the deposits to build up in the normal way. It was believed that this procedure would conform more closely than the former to what happens in ordinary automobile use. This belief is justified by the fact that we were able to duplicate results as closely as could be desired. We wish to acknowledge the valuable suggestions of Dr. W. F. Faragher, assistant director of the Mellon Institute, during the planning of this investigation.

*Delivered at semi-annual meeting of Society of Automotive Engineers, French Lick Springs, Ind., June 1-4. Printed in June issue of society's journal.

**Table No. 1**

| Fuels— | Cas'gh'd Gasoline | Special Gasoline | Light Gravity Blend | Motor Gasoline | Benzol Blend | Cleaners' Naphtha | Kerosene |
|---|---|---|---|---|---|---|---|
| *Gravity, degree | 80.0 | 58.9 | 71.0 | 60.4 | 42.3 | 54.9 | 39.6 |
| Overpoint degree Fahrenheit | 82 | 124 | 86 | 100 | 140 | 244 | 260 |
| Dry point, degree, Fahrenheit | 270 | 434 | 418 | 435 | 423 | 419 | 481 |
| Degree, Fahrenheit | | | | | | | |
| 221 per cent | 85.0 | 24.5 | 56.5 | 32.0 | 51.5 | .... | .... |
| 284 per cent | .... | 51.3 | 76.0 | 53.8 | 72.0 | 16.7 | 3.0 |
| 392 per cent | .... | 90.4 | 90.0 | 90.3 | 95.0 | 94.0 | 66.0 |
| Per Cent | | | | | | | |
| 10 degrees Fahrenheit | 94 | 182 | 106 | 145 | 171 | 276 | 326 |
| 20 degrees Fahrenheit | 102 | 210 | 121 | 180 | 188 | 287 | 342 |
| 30 degrees Fahrenheit | 112 | 234 | 143 | 214 | 195 | 298 | 350 |
| 40 degrees Fahrenheit | 122 | 258 | 166 | 243 | 208 | 308 | 360 |
| 50 degrees Fahrenheit | 134 | 281 | 198 | 273 | 218 | 318 | 379 |
| 60 degrees Fahrenheit | 150 | 304 | 236 | 300 | 241 | 328 | 384 |
| 70 degrees Fahrenheit | 171 | 330 | 270 | 329 | 280 | 335 | 397 |
| 80 degrees Fahrenheit | 199 | 354 | 326 | 356 | 324 | 356 | 412 |
| 90 degrees Fahrenheit | 242 | 391 | 392 | 391 | 375 | 376 | 435 |
| Recovery, per cent | 93.0 | 96.5 | 92.5 | 96.0 | 97.0 | 9840 | .... |

Natural gas density, 0.67; atmospheric B.t.u., 1120; composition methane, 68 per cent; ethane, 12 per cent; carbon dioxide, 0.1 per cent; hydrogen, 1.4 per cent; oxygen, 0.1 per cent.

*American Petroleum Institute at 60 degrees Fahrenheit.

**Table 2—Data of the Lubricating Oils Used**

| No. | Source— | Gravity at 60° F. *Degrees | Viscosity, Bayboit Specific Grav. | Sec. at 100° Fahrenheit | Sec. at 210° Fahrenheit | Flash Point by Open Cup Degrees Fahrenheit | Fire Point Method, Degrees Fahrenheit | Carbon Residue Conradson Test, Per Cent |
|---|---|---|---|---|---|---|---|---|
| 1. | Pennsylvania | 0.8753 | 30.2 | 365 | 56 | 440 | 490 | 0.51 |
| 2. | Mid-Continent Blend | 0.9034 | 25.2 | 357 | 54 | 412 | 474 | 0.64 |
| 3. | Gulf Coast | 0.9370 | 19.5 | 358 | 49 | 358 | 408 | 0.12 |
| 4. | Pennsylvania Blend | 0.8745 | 30.4 | 307 | 53 | 424 | 476 | 0.44 |
| 5. | Mid-Continent Distilled | 0.9024 | 25.3 | 302 | 51 | 422 | 476 | 0.26 |
| 6. | Gulf Coast | 0.9320 | 20.3 | 200 | 47 | 350 | 400 | 0.03 |

*American Petroleum Institute.

**Table 3—Comparison of Results of Test Runs Under Duplicated Conditions**

| Fuel used air fuel ratio duration of run, hour | Motor Gasoline 12 to 1 | | Special Gasoline 10 to 1 | | Natural Gas 12 to 1[1] | |
|---|---|---|---|---|---|---|
| Heat Temperature, degree Fahrenheit | 15 | | 36 | | 15 | |
| Room Temperature, degree Fahrenheit | 437 | | 365 | | 400 | |
| Oil Temperature, degree Fahrenheit | 78 | | 73 | | 73 | |
| Dilution, per cent | 100 | | 86 | | .... | |
| Speed, r.p.m. | Negligible | | 9 | | .... | |
| Power Developed, Watts | .... | | 1,140 | | 1,090 | |
| Run No. | 620 | | 700 | | 700 | |
| Oil Consumption, cc. | C-12 | C-12 | DE-3 | DE-4 | C-61 | C-62 |
| Total Carbon Deposit per Liter of oil, grams | 165 | 155 | 280 | 290 | 190 | 200 |
| | 1.941 | 1.845 | 3.158 | 3.479 | 1.810 | 1.901 |

[1]Determined by carbon dioxide content in the exhaust gas.

**Table 4—Conditions of Tests and Results Obtained**

| Air Fuel Ratio 12 to 1. Duration, 15 Hours. Head Temperature, Degrees Fahrenheit | Oil Temperature, 99 Degrees Fahrenheit. Speed, 1090 r.p.m. | Room Temperature, 73 Degrees Fahrenheit. Power, 700 Watts. Oil Consumption, Cc. | Lubricating Oil. Motor Gasoline. Carbon on Head, Grams | Head Carbon Value. Oil, Gram |
|---|---|---|---|---|
| | | Water Cooling | | |
| 338 | 300 | 2.663 | | 8.9 |
| 340 | 260 | 2.417 | | 9.3 |
| 368 | 280 | 2.274 | | 8.1 |
| 400 | 260 | 2.178 | | 8.3 |
| 435 | 230 | 1.414 | | 7.4 |
| 455 | 230 | 1.371 | | 6.0 |
| 665 | 320 | 0.951 | | [2]8.0 |
| | | Evaporation Cooling | | |
| 336 | 250 | 2.068 | | 8.0 |
| 338 | 400 | 3.447 | | 8.6 |
| 338 | 400 | 3.660 | | [3]9.2 |

[2]Air cooled.
[3]This run made with the benzol blend.

**Table 5—Test Runs With Different Fuels; Other Conditions**

| Air Fuel Ratio, 12 to 1. Duration 15 Hours. Fuel | Head Temperature, 400° F. Speed, 1090 r.p.m. Oil Consumption, Cc. | Head Temperature, 73° F. Power, 700 Watts. Head Carbon, Grams | Head Temperature. 400° F. Speed, 1090 r.p.m. Oil Consumption, Cc. |
|---|---|---|---|
| Natural gas | 190 | 1.474 | 7.7 |
| Casinghead Gasoline | [4]190 | 1.650 | 8.7 |
| Special Gasoline | 240 | 1.954 | 8.1 |
| Light Gravity Blend | 250 | 2.063 | 8.2 |
| Motor Gasoline | 260 | 2.178 | 8.3 |
| Benzol Blend | 310 | 2.879 | [5]9.3 |
| Cleaners' Naphtha | 190 | 2.778 | 14.6 |
| Kerosene | 290 | 4.147 | 14.3 |

[4]Control of the supply of this highly volatile fuel was irregular.
[5]In the benzol runs the air fuel ratio was not corrected for the 10 per cent difference in gravity between the benzol blend and motor gasoline.

### Test Apparatus and Procedure

The experimental apparatus was evolved by successive modifications of an 850-watt Delco generating plant. The air-cooled head was replaced by a suitably designed water-cooled head carrying a thermocouple-well projecting into the combustion chamber about ⅜-inch. The wall thickness at the bottom of this well was 1/16-inch, and the temperatures observed bore a constant relation to the temperatures of the inner wall of the combustion chamber.

The original air-cooled cylinder was used interchangeably with a water-cooled cylinder, and a water-jacketed sump replaced the bottom of the crankcase. A system for circulating a small charge of oil was installed, this substitution making possible the observation of very small variations in oil consumption. A gear oil-pump, mounted on the camshaft, supplied oil from a graduated glass reservoir to a small cup fitting under the lubricating gear, which delivered the oil to the crankshaft and other moving parts. Overflow and drainage oil returned to the glass reservoir for recirculation, and makeup oil was added there from a sight-feed lubricator.

The engine was supplied with fuel through a small carburetor, the rate of supplying fuel being controlled by timing the flow of a measured volume from a pipette. The air entering the carburetor was maintained at a definite temperature by an exhaust-heated stove. Load on the generator, and hence on the engine, was controlled by resistances. The water supplied to the different parts of the engine was kept at the required temperature by cooling coils. The speed of the engine and the total number of revolutions were observed by a counter driven from the flywheel end of the crankshaft. A covered peep-hole afforded visibility in the crankcase.

In preparation for a run, a 1-liter (0.947-quart) charge of oil was introduced into the glass reservoir, the valves were ground, the clearances set, and the spark timing fixed. The sight-feed lubricator was charged with 200 cc. (12.204 cubic inches) of oil. In starting a run, the apparatus was brought to selected conditions as quickly as possible to avoid dilution of the oil. To make its effect on other conditions uniform, room-temperature was kept constant throughout each run. The average oil-temperature and cylinder-head temperature were controlled to within 6 degrees Fahrenheit of the selected values. The speed of the engine, as measured in revolutions per minute, and the rate of fuel intake were kept constant at constant throttle-setting, giving a uniform air-fuel ratio, as determined by exhaust-gas analysis. Intake-air temperature was kept constant to within 1 degrees Fahrenheit. In confirmation of the accuracy of control attained, it was observed that the power output was constant to within an average of 1 per cent.

After the completion of a run, the oil was allowed to drain from the system, the engine was dismantled, and the carbon deposits recovered. A pan, fitting down over the cylinder, was used to prevent the loss of carbon deposits on the

**Table 6—Test Runs with Different Lubricating Oils and Rich Air-Fuel Mixture**
Head Temperature, 365 Degrees Fahrenheit. Speed, 1140 r.p.m. Room Temp., 73° F. Cylinder Cooling, Water 54° F.

| Air-Fuel Ratio, 10 to 1, Duration, 26 Hours. Oil. | Oil Consump. Corrected for Dilution, Cc. | Dilution, Per Cent. | Oil Temperature, 86 Degrees Fahrenheit. Power, 700 Watts | Head Carbon Grams | Head Carbon Value Per Liter of Oil, Grams | Tri. Oil and ash free Carbon Value, Per Liter of Oil, Grams |
|---|---|---|---|---|---|---|
| **Motor Fuel** | | | | | | |
| No. 1 Pennsylvania Distilled | 330 | 12.5 | | 5.051 | 15.3 | 16.3 |
| No. 2 Mid-Continent Blend | 330 | 12.0 | | 5.628 | 17.0 | 15.4 |
| No. 3 Gulf Coastal | 320 | 11.5 | | 2.663 | 8.3 | 9.6 |
| **Special Fuel** | | | | | | |
| No. 1 Pennsylvania Distilled | 270 | 8.0 | | 4.652 | 17.2 | [6]16.7 |
| No. 1 Pennsylvania Distilled | 300 | 8.5 | | 4.034 | 13.4 | 12.8 |
| No. 3 Gulf Coastal | 290 | 9.5 | | 1.792 | 6.2 | 8.7 |
| No. 3 Gulf Coastal | 280 | 8.5 | | 2.062 | 7.3 | 9.7 |

[6]The head temperature was low during this run.

**Table 7—Test Runs With Different Lubricating Oils and Lean Air-Fuel Mixtures**
Head Temp. 400° F. Speed, 1090 r.p.m.

| Air-Fuel Ratio, 12 to 1 Duration, 15 Hours Oil | Oil Consumption | Total Carbon, Head, Grams | Room Temp. 73° F. Power, 700 Watts. Head Carbon Value, Per Liter of Oil, Grams | Oil Temp., 99° F. Motor Gasoline Tri. Oil and Ash Free Carbon Value, Per Liter of Oil, Grams |
|---|---|---|---|---|
| No. 4 Pennsylvania Blend | 310 | 2.970 | 9.5 | 8.5 |
| No. 4 Pennsylvania Blend | 270 | 2.177 | 8.0 | 6.5 |
| No. 4 Pennsylvania Blend | 160 | 1.480 | 9.2 | 7.7 |
| No. 4 Pennsylvania Blend | 270 | 2.245 | 8.3 | 7.4 |
| | | | Average 8.7 | Average 7.5 |
| No. 5 Mid-Continent Distilled | 310 | 1.605 | 5.1 | 5.5 |
| No. 5 Mid-Continent Distilled | 250 | 1.211 | 4.8 | 5.3 |
| | | | Average 4.9 | Average 5.4 |
| No. 6 Gulf Coastal | 280 | 0.776 | 2.8 | 3.7 |
| No. 6 Gulf Coastal | 350 | 0.914 | 2.6 | 3.6 |
| No. 6 Gulf Coastal | 300 | 0.905 | 3.0 | 4.1 |
| | | | Average 2.8 | Average 3.8 |
| No. 1 Pennsylvania Distilled | 260 | 2.178 | 8.4 | 7.7 |
| No. 2 Mid-Continent Blend | 260 | 2.258 | 8.7 | 8.8 |
| No. 3 Gulf Coast | 260 | 0.867 | 3.3 | 4.0 |

**Table 8—Nature of Carbon Deposits Obtained**

| Run and Oil— | Petroleum Ether Extract—Piston Per Cent | Petroleum Ether Extract—Head Per Cent |
|---|---|---|
| DE-1 No. 1 Pennsylvania | 34.9 | 16.3 |
| DE-5 No. 1 Pennsylvania | 32.7 | 17.2 |
| DE-6 No. 1 Pennsylvania | 43.0 | 18.7 |
| DE-8 No. 2 Mid-Continent Blend | 38.6 | 19.8 |
| DE-2 No. 3 Gulf Coast | 25.1 | 13.5 |
| DE-3 No. 3 Gulf Coast | 26.8 | 11.3 |
| DE-4 No. 3 Gulf Coast | 26.3 | 11.0 |

piston, the piston and head deposits being kept separate.

**Fuels and Oils Used**

Seven different liquid fuels were used in the test runs: casinghead gasoline, special gasoline, a light gravity blend, motor fuel, a benzol blend, cleaners' naphtha, and kerosene. The gravity and distillation characteristics of these fuels are given in Table 1.

Six different lubricating oils were used, two each from Pennsylvania, Mid-Continent and Gulf Coastal crude petroleum. Their gravity, viscosity, flash and fire tests, and the Conradson carbon residue are given in Table 2.

To indicate the degree of accuracy attained in duplicating results, three pairs of runs are given in Table 3 to show the range of duplication.

In presenting the results of all the experiments reported, attention has been directed to the carbon deposited in the cylinder head of the engine. It was noted that the carbon deposited on the piston was always contaminated by a considerable proportion of liquid oil. Two alternatives were possible: to report all carbon, corrected for oil content, or to report only the carbon on the head surfaces. It was found that the two methods gave comparable results. This is true in general because in these experiments the weight of deposit on the piston was relatively small, and also because, in any series of experiments in which conditions did not differ too widely, the weight of the piston deposit was approximately the same. In the experiments involving variations in temperature, the procedure adopted is logical because it is the temperature of the head surfaces, and not of the piston, which is varied. For the variations in fuel also the deposits on the head surfaces probably would be more affected by such changes than would the piston deposit.

For desposits obtained in experiments in which the lubricating oil was varied, both ways of presenting the data bring out the same facts. One disadvantage here, however, for the use of head carbon figures is that with some lubricating oils the total deposit is very small. When a fairly constant figure for piston deposit is subtracted, the carbon value, in grams of carbon per liter of oil, is perhaps unduly low. In the lubricating oil series, therefore, both the head carbon figures and the carbon value for total carbon, corrected for oil and ash are given.

These experiments were made in a substantially dust-free laboratory, which kept the ash content of the deposits down to an average of less than 5 per cent. The ash content of all deposits was determined but the figures are not sufficiently significant to be used in this report.

**Variations in Head Temperature**

The data for these experiments are presented in Table 4, from which it may be noted that the carbon deposits and the carbon values drop off with increasing temperatures. At the lowest operating temperatures slightly higher carbon values are reached than those obtained over the range of increasing temperatures next following. From the data it appears that carbon values are more or less constant until head temperatures somewhat above 400 degrees Fahrenheit are reached. At still higher temperatures there is a drop in carbon values which is believed to be real.

As might be anticipated, the deposits formed at the lower operating temperatures were much more asphaltic, softer and less adherent than those formed at higher temperatures.

**Results From Different Fuels**

In Table 5 are given figures for a series of runs that were duplicates in every way except for the fuel used. The latter varied from natural gas through a series of commercial gasolines to heavy naphtha and kerosene. No marked change in weight of deposit is to be noted until the figures for the heavy naphtha are reached; and in general it may be said that there was no significant difference for the various commercial fuels. In the case of the benzol blend, all runs made indicate that the slightly higher carbon obtained with this fuel is significant. It should be said, however, that the deposit obtained was softer and more soot-like than those from other fuels.

The reason for using natural gas in this series was to obtain figures on a fuel that would be expected to leave little or no fuel carbon. It is surprising to note that the carbon value for natural gas is only about 5 per cent less than those obtained for the commercial gasolines. This may be interpreted to mean that in a 12-to-1 mixture a good average grade of gasoline plays a very small part in the deposition of carbon. The excessively high values obtained with heavy naphtha and kerosene are believed to be attributable to poor carburetion and the incomplete oxidation and probably asphaltization of sprayed liquid. The high result obtained with casinghead gasoline is not believed to be significant. Considerable difficulty was encountered in controlling the supply of this very "wild" liquid. The metering in the carburetor was erratic and the flow very irregular.

**Oils and Mixture Ratios**

Rich Mixtures.—In this study the engine was operated under conditions intended to stimulate those met by automobile in ordinary cool weather. The mixture ratio was set at 10 to 1, and all temperatures were kept low (See Table 6.) The runs were of 36-hour duration, in which time the dilution-equilibrium point had been passed. In spite of the heavy deposits formed there was no evidence of loss of carbon due to flaking. In the series run on ordinary motor fuel, three representative commercial oils, of matched viscosity at 100 degrees Fahrenheit, were compared. It will be noted that the Pennsylvania distilled oil and the Mid-Continent blend gave head carbon deposits, and both head and total carbon values, considerably higher than those obtained with the Coastal oils. When a special gasoline, giving slightly less dilution was used as fuel, the deposits and carbon values were slightly lower, but the ratios of the carbon values among these three oils were approximately the same.

It is interesting to observe that with the same fuel, and under the same conditions, the different oils suffered crankcase dilution to the same extent. These dilution figures were obtained by use of the Sligh vaccum-distillation test, which we have found to be accurate to 0.5 per cent.

Lean Mixtures—In Table 7 are given deposits and carbon values for experiments made under conditions simulating efficient summer engine operation. The mixture was relatively lean and the head and oil temperatures rather high. The three oils compared at rich mixture ratios and three additional oils of corresponding origin and of slightly lower matched viscosity were used. It will be seen that the carbon deposits and carbon values for oils Nos. 4 5 and 6 decrease markedly in the order: Pennsylvania blend, Mid-Continent distilled and Gulf Coastal, the oil-and-ash-free carbon value of the Pennsylvania oil being twice that of the Coastal oil, and the Mid-Continent distilled falling half-way between. For the comparison of Pennsylvania distilled, Mid-Continent blend and Gulf Coastal, as represented by oils Nos. 1, 2 and 3, the Coastal oil was found to give carbon values approximately half those for the other oils. By comparing Table 6, it will be noted that this ratio holds for rich mixtures, where the fuel and the combustion temperatures play a part in the deposition, as well as the leaner mixtures where the carbon deposit is attributable almost exclusively to the lubricating oil.

**Volatility of the Oil**

In Table 8 are given extraction figures on carbons obtained at rich mixtures corresponding, apparently, to the running conditions of most automobiles. These figures show that the carbons from Gulf Coastal oils contain less oily matter than do the other less volatile oils. This is believed to be due to the greater volatility of the Coastal oil which permits it to boil away without leaving much deposit. This may also explain the varying nature of the carbon deposits from the different oils. In all the runs made, no matter what the conditions, the carbon Coastal from the oils was, in general, dry, powdery and friable over the hot metal areas and only slightly more coherent over the cooler areas. Carbon from the Pennsylvania oils, on the other hand, was extremely hard and adherent over the hotter areas and sticky and asphaltic in appearance over the cooler areas. It is believed that the sticky nature of this deposit would cause retention of a higher proportion of dust from a dust-laden atmosphere such as prevails in road operation.

It has been suggested that the Conradson carbon residue of lubricating oils offers an approximate measure of the tendency to deposit carbon in an automobile engine but little experimental support for this supposition has hitherto been published.

We believe there is a close connection between the volatility of an oil and its carbon-depositing tendency. If an oil contains a fair proportion of hydrocarbons that are nonvolatile at the prevailing temperature of the metal surface, such as a steam refined cylinder stock, this residue will progressively crack and oxidize to sticky and asphaltic materials which will gradually bake into dense, adherent deposits. If, on the other hand, the oil can distill off fairly cleanly, it probably will take much longer to produce a deposit of equal thickness. In addition, it appears that a deposit from such a volatile oil will contain a smaller quantity of binding material, will be more friable than a deposit from a higher-boiling oil and will therefore be carried off to a greater extent with the exhaust.

From this study it would appear that the popular belief concerning the connection between the so-called heat-resisting properties of an oil and its desirability is probably erroneous. No lubricating oil can be expected to remain undecomposed at the flame temperatures prevailing in the combustion chamber. The oil, therefore, which will leave the smallest residue on evaporation from the metal surfaces will give the least trouble from combustion chamber deposits.

## ROCKY MOUNTAIN AREA

(Continued from Page 64)

Hogback or Rattlesnake. It is one of the largest structures in the northern part of New Mexico. No test has ever been drilled there.

South of San Juan County, in McKinley County, Benedum & Trees, of Pittsburgh, Pa., are drilling a wildcat on a new structure. This will probably be the first completion in that area, but the region is expected to have a large play in the next few months.

**Utah Operations**

The Cane Creek well of the Midwest Refining Co. and the Utah Southern Oil Co. near Moab, Utah, has pulled the 6-inch casing and will underream through the sand that produced oil and reset the 6-inch below the producing formation after mudding off. When the wells is shut off and the casing set, the hole will be drilled down and another producing sand is expected about 200 feet below the present bottom of the hole. At present the hole is standing at 2,028 feet.

The second well in the Moab district is at 1,100 feet. This well is being drilled by the Midwest Refining and the Utah Southern and should find the pay about 2,000 feet. It is located about 5 miles southwest of the Cane Creek or discovery well and on a separate structure. The location is on Section 17-27-20.

**Oil Displacing Horse**

Thirteen engines are now operating on fuel oil on the Great Falls-Cut Bank division and the Great Falls-Havre division of the Great Northern Railroad. The consumption of fuel amounts to 10 cars daily and the rest of the locomotives on these two divisions are being changed over to fuel oil burners as fast as they can be handled through the shops.

Oil has practically driven the horse from the northern Montana plains. Except for light duties about the farms, where single teams usually fill all the requirements, the horse is now being abandoned both for driving and work. The gasoline tractor takes the place of several teams at once and enables the rancher and farmer to double the work done with horses.

The horses were mainly turned out on the ranges and they have bred until they have become a menace to the crops. A great roundup is in progress in the northern counties and an auction of some 500 head was held recently. The animals brought an average price of $4 to $5 per head and a packing firm bought 250 for slaughter, to be turned into food. This is the first auction and many more are expected to follow as a result of the roundup. At this auction, some of the horses sold as low as 25 cents each.

**Runs From the Fields**

| | |
|---|---|
| Sunburst | 744,000 |
| Teapot | 1,320 |
| Big Muddy | 3,490 |
| Grass Creek | 3,070 |
| Elk Basin | 610 |
| Greybull | 30 |
| Rock River | 2,920 |
| Notches | 300 |
| Rex Lake | 400 |
| Lance Creek | 1,710 |
| LaBarge | 100 |
| Poison Spider | 950 |
| Osage | 350 |
| Hamilton Dome | 1,280 |
| Lander | 300 |
| Byron | 40 |
| Lost Soldier | 4,150 |
| Ferris | 110 |
| Simpson Ridge | 170 |
| Cat Creek | 2,860 |
| Lake Basin | 160 |
| Florence | 425 |
| Moffat | 3,795 |
| Tow Creek | 100 |
| Fort Collins | 2,920 |
| Iles | 100 |
| Boulder | 25 |
| Rangeley | 100 |
| Hogback | 470 |
| Rattlesnake | 985 |
| Artesia | 3,000 |
| Total | 3,459,894 |

**Production Figures Month of May, 1926**

| | |
|---|---|
| Salt Creek | 1,611,314 |
| Teapot | 39,270 |
| Big Muddy | 109,030 |
| Grass Creek | 92,040 |
| Elk Basin | 19,360 |
| Greybull | 1,480 |
| Rock River | 90,030 |
| Notches | 600 |
| Lance Creek | 54,240 |
| LaBarge | 3,850 |
| Poison Spider | 22,020 |
| Osage | 10,850 |
| Hamilton Dome | 37,880 |
| Lander | 8,550 |
| Byron | 1,160 |
| Lost Soldier | 144,540 |
| Simpson Ridge | 5,510 |
| Ferris | 2,930 |
| Cat Creek | 89,710 |
| Lake Basin | 5,040 |
| Sunburst | 774,000 |
| Florence | 11,290 |
| Moffat | 116,585 |
| Tow Creek | 3,210 |
| Fort Collins | 79,870 |
| Iles | 2,950 |
| Boulder | 775 |
| Rangeley | 3,100 |
| Hogback | 13,920 |
| Rattlesnake | 11,385 |
| Artesia | 93,000 |
| Total | 3,459,489 |

## PENNSYLVANIA MARKET MERELY HOLDING OWN

OIL CITY, Pa., June 12.—Gasoline prices in the Pennsylvania area have been merely holding their own during the past week. There has not been much demand, just enough to maintain present quotations.

During the week there was a big decline in the prices of kerosene, amounting to about one cent, and the demand has fallen off considerably. This was to be expected on account of the ending of the burning and tractor season. Wax strengthened during the week with demand good. There was no great demand for fuel oil and prices declined some. Neutrals continued very scarce, none at all being offered. The demand for neutrals continued brisk. Cylinder stocks are a little softer and not in much demand.

## W. L. SCOTT SALES MANAGER

W. L. Scott, former sales manager of The Texhoma Oil and Refining Co., has been made general manager of the Plains Pipe Line Co. The latter company of which W. M. Priddy, president of the American Refining Co., Wichita Falls, Tex., is president, operates a refinery in the Panhandle, Tex., Field.

# REFINING AND MARKETING

## PACIFIC GASOLINE CO. BOUGHT BY STANDARD

The largest purchase involving natural gasoline production ever made was consummated during the past week in the purchase of the properties of the Pacific Gasoline Co. by the Standard Oil Co. of California. The Pacific company was the largest producer of natural gasoline on the west coast and the combined production of the Standard and Pacific is now the second largest in the world.

The Pacific Gasoline Co. on June 1 owned and operated 28 natural gasoline plants with a combined capacity of 235,500 gallons daily. These plants were scattered in all the principal California fields. The Standard has 17 plants with a combined capacity of 117,910 gallons daily.

With its new purchase the Standard will own 45 plants with a combined capacity of 353,410 gallons daily. This is the largest number of plants owned by any one company and the capacity is second only to the Phillips Petroleum Co. which is the largest producer of natural gasoline.

No details in connection with the purchase were announced. It is assumed that the operations of the two companies will be consolidated as much as possible as in some instances both companies are taking gas from the same field. A report from the Pacific coast states that Harry J. Bauer, president of the Pacific company, will head the natural gasoline department of the Standard. In addition to the natural gasoline plants, the Pacific owns a small skimming plant at Taft, Calif.

The Pacific Gasoline Co. plants involved in the purchase and their capacities are as follows:

| Plant Location— | Capacity Gals. |
|---|---|
| Athens | 7,500 |
| Brea | 3,000 |
| Dominguez | 5,000 |
| Elk Hills (2) | 9,500 |
| Huntington Bh. (2) | 20,000 |
| Fellows | 4,000 |
| Inglewood (2) | 11,000 |
| Kerto | 7,500 |
| Long Beach (3) | 25,000 |
| Midway (8) | 89,000 |
| Santa Fe Springs (2) | 19,000 |
| Sunset Field | 4,000 |
| Venture (3) | 31,000 |
| Total | 235,500 |

## COURT BARS LOTTERY IN SALE OF GASOLINE

RICHMOND, Ind., June 14.—Some trade practices of many service stations in this state were given a jolt with the conviction in Circuit Court here of Dennis DeHaven of the Vortex Oil Co., who was charged with operating a lottery in connection with sales of gasoline.

Many other companies in this state are said to have conducted similar schemes to stimulate trade. Mr. DeHaven gave tickets with gasoline purchases which entitled the holders to chances on gasoline to be given away.

The case was filed by competitors of the Vortex company to test the legality of the state's antilottery law. The competitors charged that the Vortex company had attempted to lower gasoline rates here by these practices. Mr. DeHaven's fine was remitted.

### TAKES DIAMOND STATIONS

OKLAHOMA CITY, Okla., June 12.—The Texas Company announces that it has taken over three Oklahoma City filling stations from the Diamond Oil Corp. of which James T. Edwards, former secretary of the Oklahoma Oil Dealers' Association, is president and general manager.

## MARKETING CONDITIONS ARE IMPROVED COMPARED WITH THOSE OF YEAR AGO

Marketing conditions of the country are unusually serene for this season, having shown a very remarkable improvement the past year, according to a survey of the middle western and northern states just completed by the American Oil Men's Association under the direction of H. G. James, secretary.

In the current bulletin of the association, Mr. James revealed the detailed results of the survey. Michigan reported no competitive price cutting at this time. A few instances of irregularity are in evidence in Wisconsin and Minnesota has one case. The latter state is enjoying the greatest harmony among marketers in years, Mr. James stated.

Nebraska is comparatively free from disturbances, according to the survey. Omaha is 1 per cent under the market and there are a few other isolated cases of cut prices. Iowa is not quite so fortunate. The Iowa tankwagon price is 21 cents, including tax, and service station 23½ cents, including 2 cents tax. In Des Moines there is a station whose more or less now celebrated policy has upset conditions there. This situation and the competing station directly across the street have a posted price of 13.9 cents plus tax. Two other small, privately owned stations are selling 1 cent below the market in that city. Membership contract discounts are responsible for cut prices at Ottumwa and Grundy Center.

Missouri is fairly free from market disturbances, taken as a whole. A station at St. Joseph is responsible for two or three stations selling 2 cents under the posted price. There have been some 40 odd cut-price stations in Kansas City, but this situation has improved considerably. There are one or two small, inconsequential irregularities out in the state.

Kansas is somewhat mussed up. In fact, the independents of that state filed a complaint before the attorney general last week. They contended that the intercity feature of the quantity discount contracts was just as unfair for Kansas as for Wisconsin, where it was discontinued under attack of the State Bureau of Markets. It was set forth that the Kansas tankwagon was 1 cent under the rest of the Chicago level and that in addition, a discount of 1 cent a gallon on 50-gallon fills had been put in operation in Kansas and not in the rest of the Indiana territory. This policy has proved offensive to both jobbers and refiners, who claim they cannot operate under both it and the quantity discount contract. One refiner stated when holders of marginal contracts insisted that the tankwagon was the posted price, less the quantity discount and 50-gallon dump discount and demanded the discounts it was impossible for the refiner to get by. It was also contended that the maintenance of tankwagon at Kansas City, Kans., above the rest of the state was clearly a violation of the Kansas law. The attorney general immediately started an investigation. There is considerable dissatisfaction in Kansas over state oil inspection and there is talk of paying the inspection fee under protest and tying up the funds as was done on a former occasion when the state was required to refund about $112,000.

Illinois is enjoying a much better state of marketing than a year ago. One company still sells gasoline at Peoria 2 cents under the market and insists that it always will, as lower price is the fundamental policy upon which the company has been built. As a result, there are two or three other stations in Peoria under the regular market. There are several small resale accounts below normal in Springfield; and a garage 2 cents under at Onargo. There are several disturbed localities in the southwestern part of the state. The 100-gallon quantity fill discount still obtains in Chicago.

Both North and South Dakota are enjoying the best marketing in years. Prices over both states are normal with possibily only one or two exceptions. Conditions in Indiana are in very good shape. Reports from various other parts of the United States indicate improvement in marketing conditions as compared with last year.

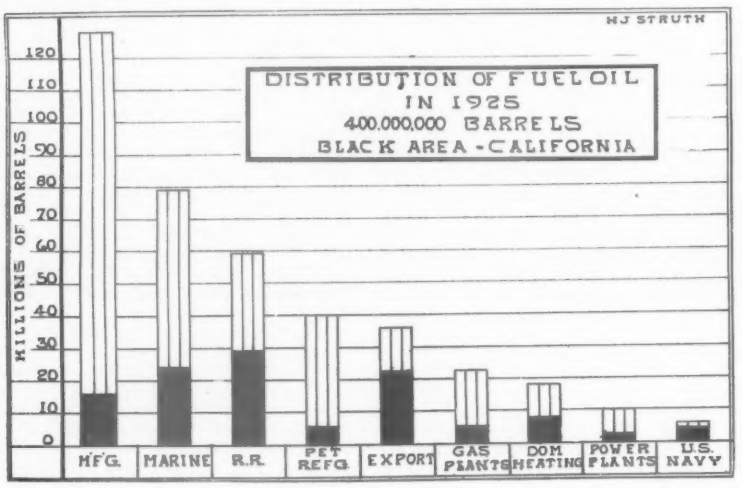
## RELATIVE CONSUMPTION OF FUEL OIL

The manufacturing industries are the largest consumers of fuel oil with the various marine uses second and the railroads third, according to data compiled by the American Oil Burners' Association. The data which is summarized in the accompanying chart are based on the 400,000,000 bbls. production in 1925.

Petroleum refiners who manufacture the fuel oil consume one-tenth of their output at their plants for heating. In California where the bulk of the fuel oil output is obtained, the refiners consume only a small fraction of their total output.

At power plants where the use of fuel oil is declining only 2½ per cent of the total was consumed in 1925. About 22,000,000 bbls. was consumed in the manufacture of gas.

The largest percentage increase in demand has been for domestic heating. This demand in 1925 was a little less than 5 per cent of the total consumption of 400,000,000 bbls.




## N. P. M. A. TO VOTE ON CONVENTION CITY

CHICAGO, June 15.—In preparation for its fall convention, the National Petroleum Marketers' Association is sending out questionnaires to its membership asking their choice as to convention cities. The questionnaire gives the members a choice of Atlantic City, St. Louis, Cincinnati, West Baden, Detroit and Chicago.

At the spring convention held here, eastern members of the association strongly agitated holding the fall meeting in some eastern point. It is expected that the eastern members will prefer Atlantic City.

## SUED FOR GASOLINE SOLD FOR KEROSENE

LANSING, Mich., June 14.—Judgments in damage suits against two oil companies alleged to have sold gasoline for kerosene were granted in the State Supreme Court of Michigan the past week.

One was a judgment of $5,000 against one of the major companies for the estate of Clark Stone, in Muskegon County, who was killed in an explosion of gasoline alleged to have been sold for kerosene in a can not painted red nor labeled "gasoline." Another company also was instructed to pay $1,000 to Lawson Rife ot Dowagiac for the death of his wife in an explosion. It was claimed the company sold for kerosene a mixture of part gasoline.

### EASON CO. EXPANDS

OKLAHOMA CITY, Okla., June 12.—The Eason Oil Co. of Enid has completed a new wholesale distributing plant at Clinton, making 20 now operated by the company in Oklahoma. E. Kobel is to manage the Clinton plant. The Eason Co. is connected with the Bolene Refining Co. and the Healdton Oil & Gas Co., T. T. Eason being an executive official of each, and it sells products of the plants of these concerns.

### RATE COMPLAINT FILED

WASHINGTON, D. C., June 12.—The Texas Company has filed a complaint against the rates and charges on petroleum and its products from points in Texas and Oklahoma, especially from Port Arthur and Tulsa to destinations in North Dakota and Minnesota as unjust and unreasonable.

### LEASES WYOMING REFINERY

THERMOPOLIS, Wyo., June 14.—The old Thermopolis refinery, which has been shut down for several years, has been leased by B. V. Hole for two years and is reconditioning the plant to operate. The plant will use crude purchased from the Warm Springs Field.

### ILLINOIS OIL JOBBERS TO MEET

CHICAGO, June 12.—The Illinois Petroleum Marketers Association of which Charles Rosenthal of the Apex Motor Fuel Co., of this city is president will hold its next meeting on June 23, at the Kaskaskia Hotel, LaSalle, Ill.

# JENKINS CRACKING PROCESS

PRODUCES QUALITY GASOLINE

Facts from performance

## CRACKING LOSS

**In checking the performance of the Jenkins Process you will find a cracking loss of 2 1/2%. This loss is the total fixed gas and soft carbon produced. The former can easily be used for fuel, and credited to the operation.**

**This low loss is the result of not over cracking the oil, which would cause, in addition to a higher loss, much inferior products.**

GRAVER Corporation Founded 1857

EAST CHICAGO, INDIANA

NEW YORK Grand Cent. Term. | CHICAGO Steger Building | TULSA Atlas Life Bldg. | HOUSTON West Building

# Brief Items for Plant Operators

## Apparatus For Acid Treating Gasoline At Western Plant

A diagram and description of the equipment used in the acid treatment of gasoline at the Taft, Calif. refinery of the Pacific Gasoline Co. is given in the current issue of The Booster, official publication of the company. The method of treatment differs from the methods in some areas in that the gasoline is sweetened with a solution of chloride of lime before the acid treatment. After the acid treatment the gasoline is passed through lime and a clay filter.

"Previous to receiving the acid treatment," C. R. Bosworth, refinery foreman says in describing the method of operation, "the gasoline is sweetened (that is, sulphur and sulphur compounds are removed) by means of a solution of chloride of lime, which is settled out and removed from the gasoline before applying the acid. The gasoline then passes through the 'continuous' treating plant shown diagrammatically in the sketch, going first to the suction of the centrifugal pump A, where it is thoroughly mixed with sludge or once-used acid coming from the settling towers H, I, J, K and L through the small plunger pump N. This gives the gasoline a preliminary treatment with sludge acid, which sludge settles out in the towers B. C and D, and is then drawn off to waste, the gasoline passing from D to a second centrifugal pump E, where it is mixed with fresh acid supplied by a second plunger pump F, which draws its supply from the acid storage tank G. After thorough mixing in the pump E, the acid settles out of the gasoline in the towers H, I, J, K and L, and is drawn off into the sludge tank O, from where it is pumped by N as stated above.

"In order to make certain that all of the gasoline will receive a uniform acid treatment, both of the plunger pumps F and N are driven mechanically and positively by the steam pump (not shown in the sketch) which supplies the gasoline to the treating plant, thus assuring a definite amount of acid being delivered for each stroke of the gasoline pump.

"After having received the acid treatment as above, the gasoline is passed through common unslaked lime in the tower M, the lime neutralizing any acid which may have carried over from the settling towers.

"Finally, in order to clear up the gasoline and remove any undesired compounds which have been formed by the acid treatment, the gasoline is agitated with clay (fuller's earth) in the agitator P; settled out in the tank Q; and after passing through a filter press to remove all traces of the clay, is pumped to storage, ready for shipment in tank cars as commercial gasoline."

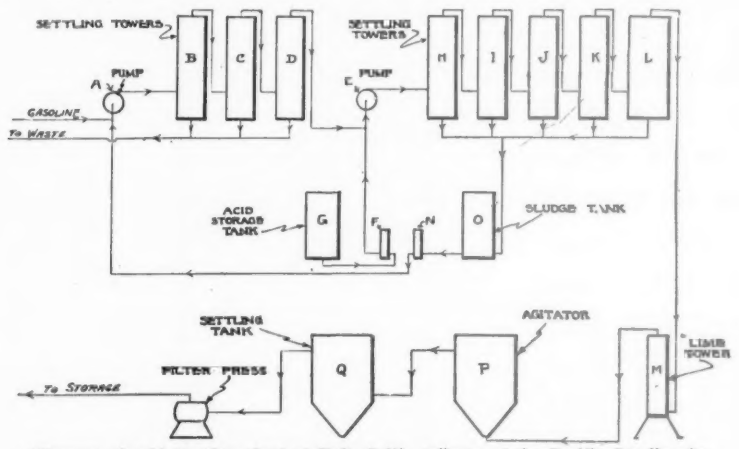



Diagram of acid treating plant at Taft, Calif., refinery of the Pacific Gasoline Co.

## BUREAU OF STANDARDS TESTS SEEN BY N. P. A.

WASHINGTON, D. C., June 11.—Approximately 50 chemists and plant operators representing 32 member companies of the National Petroleum Association today visited the Bureau of Standards for the purpose of getting first hand information regarding the bureau's method of conducting the many tests for petroleum oils. The visit, which was arranged by the Department of Standards and Tests of the National Petroleum Association, proved to be one of the most interesting trips ever sponsored by the association.

Doctor Dickinson, head of the Bureau of Standards, with associates conducted the tests. The following tests were among those demonstrated: Carbon residue, distillation, corrosion, crankcase dilution, viscosity, flash and fire, and the pour tests. Likewise the methods of testing thermometers and hydrometers were demonstrated, and each representative left his thermometer to be tested. Fifty-three thermometers were left for that purpose. As an indication of the value of this visit, a preliminary examination by the bureau's experts showed that 22 of these 53 were not of the approved type.

Each man was furnished with a sample of oil which had been checked against the bureau's master viscosimeter for determining correction factors in plant instruments. Many of the companies sent to the bureau samples of oil kept in quantity for the purpose of running check tests on viscosimeters. Such samples will be certified and returned. In addition each man was furnished with a copy of the latest "National Standard Petroleum Oil Tables" and other pamphlets.

In order to facilitate the demonstrations, those attending were separated into four groups, and each test was run for each group so that everyone could see in detail all of the work in connection with the tests. Four chairmen were appointed, one for each group. Those who served in this capacity were S. P. Waugh of the Tide Water Oil Co., C. A. Neusbaum of the Standard Oil Co. of New Jersey, Fred E. Rosenstiehl of The Texas Company, and C. T. Smith of the Atlantic Refining Co.

In order that work of this character might be continued, a group system of technical men was created. This work is to be carried on under the personal supervision of Fred G. Clark, trustee in charge of the Department of Standards and Tests. Five groups were created and a temporary chairman was appointed for each group. A date was set for an early meeting of each group, at which time a permanent organization will be effected and definite plans made for the future. The groups and temporary chairmen are as follows:

Bradford—Frank Phillippbar, Kendall Refining Co.

Butler—W. M. Cross, Butler County Oil Refining Co.

Oil City—R. R. Buckham, Independent Refining Co.

Warren—E. M. Hyatt, Pure Oil Co.

Pittsburgh—J. E. Babb, Waverly Oil Works Co.

## KETTLE CREEK PLANT IS DAMAGED BY FIRE

EL DORADO, Ark., June 12.—Fire caused by a flash at an exchanger at the refinery of the Kettle Creek Refining Co., just outside of the El Dorado city limits, Friday, destroyed four exchangers, one crude still, the receiving house and fittings adjacent to the damaged property. The loss is estimated between $50,000 and $60,000, according to W. B. Hassett, president of the refining company.

The fire raged for three hours before it was extinguished by the refinery's fire fighting forces augumented by the El Dorado city fire department. No one was injured. The fire was confined to the area in which it originated and never threatened the cracking stills.

Work was immediately started clearing away the debris and construction work of the destroyed buildings is underway. Officials hope to have the destroyed section in operation within two weeks.

## DUBBS UNIT FOR GRANDFIELD

The Bell Oil & Gas Co., during the past week, started construction work for a 1,000-bbl. Dubbs unit at its Grandfield, Okla. refinery. The unit will be in operation by late summer. This is the first cracking unit to be erected at the Grandfield refinery. In addition to the cracking unit the storage capacity of the refinery is being increased with improvements in other phases of the plant's operation.

## BUY MONTANA REFINERY

The American Oil & Refining Co. refinery at Great Falls, Mont., which has been shut down for some time has been purchased by the Great Falls Producers & Refiners Corp., Montana, and will start operating in the near future. Additional equipment has also been purchased to install a cracking plant. The refinery will operate on Sunburst crude.

## AMONG THE TECHNICAL MEN

J. W. King, superintendent of the Okmulgee, Okla. refinery of the Independent Oil and Gas Co., is one of the few active operators who has been connected with the Mid-Continent refining industry from its beginning. Probably no single individual contributed more to the early development of processes for the extraction of lubricating oils from Mid-Continent crudes than did Mr. King.

J. W. King

Mr. King received his early training in the Pennsylvania field. He first worked at a plant at Franklyn now owned by the Atlantic Refining Co. Later he was employed by the Seneca Oil Works and Conewango Refining Co. at Warren, Pa. He was with the latter company eight years in the capacity of assistant superintendent.

His connection with the Mid-Continent field started when he finished building of a refinery at Humboldt, Kans. for the Webster Refining Co., one of the first plants in the Mid-Continent field. After serving for a time as superintendent of the refinery he returned east and for three years was assistant superintendent and later superintendent of the Marietta, Ohio, refinery of the Sterling Refining Co.

Returning to the Mid-Continent he was connected with the Eastern Kansas Refining Co., Erie, Kans., Great Western Refining Co., Erie Kans., and the Cudahy Refining Co., Coffeyville, Kans. The latter company was later taken over by the Sinclair Refining Co. During this period he devoted most of his time to the development of lubricating oil manufacture. He was eight years superintendent of the lub oil plant refinery of the Cudahy company and was later transferred to Vinita, Okla., as superintendent of the Sinclair plant.

Eight years ago Mr. King became superintendent of the Okmulgee, Okla. refinery of the Allied Refining Co. Last year when the company was purchased by the Independent Oil and Gas Co., he continued as superintendent. For the past few months the company has had under way one of the most extensive improvement programs in the Mid-Continent field. The operations of the old Allied plant have been combined with those of Indiahoma Refining Co., also purchased by the Independent. In addition Mr. King has had charge of the installation of a complete lubricating plant and cracking equipment.

# Oil Securities Were Active and Firm

## Issues of The Texas Company and Marland Co. Sold Near Year's High and Were Features of the Week's Market

By N. O. Fanning

*New York Bureau, The Oil and Gas Journal, Room 543, 30 Church St., New York*

NEW YORK, June 14.—Oil securities were active and firm during the week with The Texas Company and the Marland company featuring. These issues sold near the year's high levels.

After slumping to 115¾ from a recent high of 128⅜, Atlantic Refining appeared to have resumed its upward course, based largely on the company's earning power and financial position, both of which are improving steadily.

**Amerada Corporation**

Amerada corporation was active with an advance to a new high since the stock was recently listed on the New York Stock Exchange.

**Lago Oil**

One of the most active stocks among the newcomers on the New York Stock Exchange has been Lago Oil & Transport, the bulk of the heavy transactions being around 23. This represents a gain of about four points over the opening price of 19¼. There is a considerable amount of Lago Oil & Transport stock outstanding, which partly explains the big turnover.

**South American Oils**

The South American oil stocks have taken first rank as a speculative medium, supplanting in part the domestic issues. The explanation is that some of these companies may prove the leading crude oil producers of the future. That some have large reserves of oil underground is a known fact, the chief speculative consideration being the ability to move this oil to market on a profitable basis. There is the political aspect to be considered, also, and the oil operators are hoping experiences which some have had in Mexico will not be repeated.

Any enterprise, to be a financial success, on which the real worth of its securities depends, must be well managed. This will prove one of the best tests of the future of the South American oil business. Development of oil resources in South America involves a large investment. The actual drilling is only a minor problem. To move the oil, once it is taken from the ground, 100 to 1,000 miles to seaboard, will require a large amount of capital, to say nothing of engineering ability and perseverance.

In the United States, the only question is that of the actual existence of oil in commercial quantities. In many parts of South America, the existence of oil is practically assured, but then the work has just begun. South American laws and physical conditions differ radically from those in the United States.

This explains the success of the larger companies in South American oil development. International Petroleum, Ltd., is estimated to have spent $50,000,000 in Colombia alone before any amount of oil could be marketed from its concessions in that country.

The Gulf Oil Corp. appears to be going into Colombia and Venezuela oil development on an intensive scale. Aside from its own lands, it is undertaking the development of lands controlled by some other companies. It will spend millions of dollars in solving the problem of transporting their production to seaboard.

In South American, as well as other, oil development, financial success will depend on the sale of oil in the markets at a price to pay for all of the expense and still leave a reasonable margin of profit to the producer.

The present size of the petroleum industry is due in part to the dependence of motor transportation on gasoline and lubricating oil. The Royal Dutch annual report for 1925 stresses the coming importance of air transportation to the oil industry. Airplane engines require the highest grade of gasoline and oils. At the rate air transportation is developing, the oil business will have to look upward as well as ahead.

**New Financing**

T. Hall Keyes & Co. of New York, and McCown & Co. of Philadelphia are offering 50,000 shares of cumulative preferred convertible stock of the Municipal Service Corp. of New York for $25 a share. The stock has no par value, and is preferred as to cumulative dividends at the rate of $2 a share a year. The company operates a string of independent gasoline service stations in and around New York City, and has a sea loading terminus and tank farm at Bayonne with storage capacity of 5,000,000 gallons. The company imports some of its gasoline from Trinidad, it is understood.

**Standard of California**

The Standard Oil Co. of California is distributing to 12,000 employes under its stock purchase plan 481,976 shares of stock of approximately $28,000,000 market value. The actual sum accumulated under the plan was nearly $26,000,000, of which $15,500,000 was paid by employes and $7,750,000 contributed by the company. The remainder accrued from dividends paid and rights.

**Shaffer Oil & Refining**

Shaffer Oil & Refining Co. reports April gross revenue of $1,997,408, against $1,326,006 and net operating earnings after expenses of $673,832, compares with $372,196. For the 12 months ended April 30, 1926, gross revenue was $17,765,961 comparing with $11,939,306 and net earnings of $5,261,196 contrasted with $3,225,597 in the previous year.

**California Petroleum**

The California Petroleum Corp. and subsidiaries report for the quarter ended March 31, 1926, net income of $1,246,885 after depreciation, depletion, interest, Federal taxes, etc., equivalent to 69 cents a share (par $25) earned on 1,800,429 shares of stock. This compares with $1,105,739, or 61 cents a share based on the present share basis, in the first quarter of 1925.

The consolidated income account for the quarter ended March 31, 1926, compares with the same quarter of 1925, as follows:

| | 1926 | 1925 |
|---|---|---|
| Gross earnings | $6,909,510 | $4,769,530 |
| Expenses, depr., depl. etc. | 5,390,688 | 3,404,276 |
| Interest, etc. | 143,738 | 150,515 |
| Fed. tax. res. | 128,199 | 109,000 |
| Net income | $1,246,885 | $1,105,739 |
| Preferred divs. | ..... | 207,814 |
| Com. divs. | 916,375 | 304,098 |
| *Spl. reserve | ..... | 93,531 |
| Surplus | $ 330,510 | $ 500,296 |

*Provision for redemption of preferred stocks and bonds of subsidiaries.

The company is now carrying 6,300,780 bbls. of crude oil, gasoline and other oil products in storage, an increase of 478,684 bbls. since December 31, 1925.

**Union Oil of California**

The Union Oil Co. of California has issued a balance sheet as of March 31, 1926, after giving effect to the result of the recent oil fires. It compares with December 31, 1925, as follows:

| Assets | Mar. 31, '26 | Dec. 31, '25 |
|---|---|---|
| Properties | *$208,000,113 | $187,218,562 |
| Investments | 872,862 | 997,925 |
| U. S. Securities | 7,600,000 | 7,000,000 |
| Cash | 12,162,814 | 6,893,349 |
| Bills & accts. recv. | 7,787,301 | 7,002,562 |
| Employ. stk. subs. | 486,387 | 579,003 |
| Inventories | 27,894,679 | 33,527,098 |
| Deferred charges | 590,844 | 598,175 |
| Total | $265,395,000 | $243,816,675 |
| **Liabilities** | | |
| Capital stock | $ 94,553,450 | $ 94,506,225 |
| Bonds | 23,977,500 | 24,100,500 |
| Purch. money obligations | 694,694 | 495,822 |
| Empl. stock subs. | 462,850 | 514,225 |
| Accts. payable | 4,374,304 | 4,677,317 |
| Accrued interest | 163,328 | 353,424 |
| Cont. and tax res., etc. | 4,406,296 | 3,066,250 |
| Depr. and depl. reserves | 84,549,916 | 84,403,310 |
| Drilling exp. reserve | 21,056,474 | ..... |
| Surplus | †31,156,188 | 31,699,602 |
| Total | $265,395,000 | $243,816,675 |

*Item of oil lands, rights and leases in properties account does not include $22,497,090 representing appreciation of new discovery areas brought in as producing territory subsequent to March 1, 1913, less depletion accrued to December 31, 1925, the values of which properties have not been agreed upon with the Natural Resources Division of Internal Revenue Department.

‡This figure differs from that issued previously, which was after depreciation and depletion.

†Includes $15,334,455 appreciation of new discovery areas brought in as producing territory subsequent to March 1, 1913, less depletion accrued to December 31, 1925, the values of such properties for the purpose of depletion having been agreed upon with the Natural Resources Division of Internal Revenue Department.

**Dividends**

The Humble Oil & Refining Co. has declared an extra dividend of 20 cents a share and the regular quarterly dividend of 30 cents a share, both payable July 1, to stockholders of record June 16.

The West Coast Oil Co., a subsidiary of the Associated Oil Co., has declared an extra dividend of $8.50 a share on the preferred stock in addition to the regular quarterly dividend of $1.50 a share, both payable July 6, to stockholders of record June 25.

The Mountain Producers Corp. has declared a quarterly dividend of 60 cents a share payable July 1, to stockholders of record June 15. Formerly 20 cents regular and 40 cents extra was declared quarterly.

The Salt Creek Producers Association has declared a quarterly dividend of 20

(Continued on Page 178)

**NEW YORK STOCK EXCHANGE—LIST OF ACTIVE STOCKS**

| Stocks— | Par | Clos. Quot. June 14 | Clos. Quot. June 7 | 1926 High | 1926 Low | 1925 High | 1925 Low | 1924 High | 1924 Low |
|---|---|---|---|---|---|---|---|---|---|
| Amerada Corp. | .. | 28 | 28½ | 29¼ | 21⅝ | .. | .. | .. | .. |
| Atlantic Ref., com. | 100 | 118⅜ | 117½ | 128⅜ | 97 | 117½ | 95⅛ | 140½ | 78½ |
| Barnsdall "A" | 25 | 26¼ | 25½ | 33½ | 23½ | 33½ | 18⅜ | 29½ | 14 |
| California Pet., com. | 25 | 32½ | 32⅛ | 38⅛ | 30⅝ | 34⅜ | 23⅞ | 29 | 19⅞ |
| General Petroleum | 25 | 64¼ | 64⅛ | 65⅝ | 51¼ | 59 | 42 | 45 | 38⅝ |
| Houston Oil | 100 | 62½ | •61 | 72 | 50¼ | 85 | 59 | 82½ | 61 |
| Independent Oil & Gas | .. | 24⅝ | 24¾ | 34 | 20¼ | 41⅜ | 13½ | 16¼ | 5⅜ |
| Indian Refining | 10 | 10⅜ | 10½ | 13⅜ | 9½ | 14¼ | 5½ | 7 | 3⅜ |
| Lago Oil & Trans. | .. | 23⅝ | 23½ | 23⅞ | 19¼ | .. | .. | .. | .. |
| Louisiana Oil | 10 | 16½ | 16⅜ | 19⅝ | 12 | 23⅜ | 13⅜ | .. | .. |
| Maracaibo | .. | 24½ | 22½ | 28⅜ | 20⅜ | 35½ | 20⅜ | 37¼ | 25⅜ |
| Marland | .. | 59½ | 57⅜ | 60¼ | 49¼ | 60⅛ | 32⅝ | 42 | 29 |
| Mexican Seaboard | .. | 8¼ | 7⅜ | 12⅛ | 6 | 22½ | 9 | 25⅜ | 14⅛ |
| Mid-Continent Pet. | .. | 32½ | 32 | 41 | 25⅝ | 38 | 25⅜ | 40¼ | 22⅝ |
| National Supply | 50 | 60 | 60 | 65⅞ | 55½ | 71 | 54⅜ | 72½ | 54 |
| Oil Well Supply | 25 | •31 | •30½ | 36 | 30⅛ | 38 | 33⅜ | .. | .. |
| Pan. Amer. P. & T., com. | 50 | 73⅞ | 70⅞ | 76½ | 56⅛ | 83⅜ | 59½ | 65 | 44½ |
| Pan Amer., Western B. | .. | 39 | 37¼ | 46 | 34 | 49⅜ | 37¼ | .. | .. |
| Phillips Pet. | .. | 46¼ | 45½ | 45⅜ | 42½ | 47⅛ | 36¼ | 42¼ | 28½ |
| Producers & Refiners | 50 | •13 | •13 | 17½ | 11 | 32⅝ | 12½ | 43⅛ | 29⅜ |
| Pure Oil, com. | .. | 27⅜ | 27⅜ | 31 | 26 | 33¾ | 25⅛ | 30¼ | 20 |
| Royal Dutch, N. Y., sh. | 13.40 | 53 | 53⅜ | 57⅜ | 50 | 57⅜ | 48¼ | 59½ | 40⅝ |
| Shell Transport | 10 | •45 | •45 | 48⅜ | 42 | 49 | 39⅝ | 42 | 33 |
| Shell Union, com. | .. | 25½ | 25½ | 28½ | 24 | 28⅜ | 21⅝ | 22½ | 15⅜ |
| Simms Pet. | 10 | 19⅝ | 19⅝ | 28⅝ | 20⅜ | 28½ | 17⅜ | 24 | 10⅜ |
| Sinclair Consolidated, com. | .. | 23 | 22¼ | 24⅞ | 19⅝ | 24⅞ | 17 | 17½ | 16 |
| Skelly Oil | 25 | 34 | 34¼ | 34⅜ | 27 | 32½ | 21⅜ | 29 | 17⅛ |
| Standard of California | 25 | 58⅝ | 57½ | 62¼ | 54 | 67¼ | 51⅜ | 68½ | 55½ |
| Standard of New Jersey, com. | 25 | 44⅜ | 44⅛ | 46⅜ | 40¼ | 47½ | 38⅝ | 41½ | 33 |
| Sun Oil Co. | .. | •34 | 33⅜ | 41⅝ | 31½ | 43⅞ | 38⅛ | .. | .. |
| The Texas Company | 25 | 54½ | 52⅞ | 54⅞ | 49 | 55 | 42⅜ | 45⅝ | 37⅜ |
| Texas Pacific Coal & Oil | 10 | 14⅜ | 14½ | 19½ | 12⅜ | 23⅜ | 11 | 15¼ | 8⅛ |
| Transcontinental | .. | 3½ | 3⅞ | 4⅜ | 3 | 5⅞ | 3½ | 6¼ | 3⅜ |
| Union Oil of California | 25 | 44¼ | 43⅛ | 49⅝ | 37¼ | 43⅞ | 33⅛ | 39 | 35½ |
| Union Tank, com. | 100 | •93 | •93 | 94 | 84¼ | ‡134 | 118 | 132⅞ | 94 |
| White Eagle Oil & Refining | .. | 27⅝ | 27⅝ | 29⅜ | 26¼ | 31⅜ | 25⅝ | 29⅜ | 23½ |
| **Standard Oils** | | | | | | | | | |
| Anglo-American Oil | £1 | 18½ | 18⅜ | 19⅜ | 16½ | 26⅜ | 17½ | 18⅜ | 14⅝ |
| Borne Scrymser | 100 | •225 | •225 | 248 | 226 | 240 | 205 | 164 | 150 |
| Buckeye Pipe Line | 50 | •51 | 51¼ | 59½ | 52 | 72 | 53½ | 85½ | 51 |
| Chesebrough Mfg. Co. | 25 | 70 | •66½ | 72⅜ | 63 | 74 | 48¼ | 52½ | 29¼ |
| Continental | 10 | 20⅞ | 20½ | 25⅞ | 19½ | 31¼ | 21⅜ | .. | .. |
| Crescent Pipe Line | 25 | 13⅜ | •13⅜ | 16 | 14½ | 17½ | 10 | 20 | 11⅜ |
| Cumberland Pipe Line | 100 | •108¼ | •108 | 137 | 108 | 156 | 128 | 148 | 108 |
| Eureka Pipe Line | 100 | •50½ | •51 | 63⅜ | 47⅜ | 96 | 61¼ | 105 | 74 |
| Galena Signal, com. | 100 | 20 | •20 | 32½ | 17¼ | 68½ | 23½ | 69⅜ | 62½ |
| Humble Oil & Refining Co. | 25 | 65¼ | 65 | 68¼ | 52 | 99 | 42½ | 43⅜ | 36 |
| Illinois Pipe Line | 100 | •134 | 132 | 144 | 134½ | 154½ | 124 | 161 | 123 |
| Imperial Oil, Ltd. | .. | 36¼ | 36¼ | 38⅜ | 32⅔ | 39¼ | 27¼ | 119 | 99 |
| Indiana Pipe Line | 50 | 66½ | •65½ | 67 | 58 | 84 | 57⅛ | 100 | 66 |
| International Pet. Co. | 10 | 34⅛ | 34 | 35½ | 28⅜ | 35⅜ | 22⅛ | 24⅜ | 16⅞ |
| National Transit Co. | 12.50 | 14⅜ | 15 | 20⅜ | 15⅜ | 25½ | 16½ | 25⅞ | 20⅝ |
| New York Transit | 100 | •49 | 50 | 50 | 39 | 79 | 50 | 97 | 54½ |
| Northern Pipe Line | 100 | •71 | 75½ | 80½ | 70⅝ | 88 | 67½ | 107½ | 72 |
| Ohio Oil Co. | 25 | 58 | 58⅜ | 67⅜ | 58 | 75¼ | 60 | 79½ | 53 |
| Penn.-Mex. Fuel | 25 | •18 | 18½ | 23 | 15 | 44 | 19 | 35⅝ | 27 |
| Prairie Oil & Gas | 25 | 54½ | 54½ | 60¼ | 48 | 65½ | 45⅞ | 269 | 193 |
| Prairie Pipe Line | 100 | 125½ | •124 | 127 | 122½ | 129¾ | 105 | 111 | 100 |
| Solar Refining Co. | 100 | •185 | •190 | 212 | 191 | 259 | 200 | 240 | 170 |
| South Penn Oil | 25 | •38 | 38 | 50 | 37½ | ‡197 | 139 | 176 | 117 |
| Southwest Pa. Line | 100 | •57½ | •49 | 54½ | 47½ | 84 | 50 | 89 | 68 |
| Southern Pipe Line | 10 | •70 | •68 | 74½ | 61½ | 103 | 63 | 100 | 80½ |
| Standard of Indiana | 25 | 64½ | 64½ | 70½ | 61⅝ | 70¾ | 59½ | 69⅝ | 54¼ |
| Standard of Kansas | 25 | 26¾ | 26⅞ | 36½ | 25 | 46 | 30¼ | 50½ | 32½ |
| Standard of Kentucky | 25 | 120½ | 120 | 134⅜ | 108 | 137 | 114⅜ | 121⅞ | 101 |
| Standard of Nebraska | 100 | 49 | 49¼ | †51⅛ | †42 | 270 | 231 | 262 | 198 |
| Standard of New York | 25 | 32⅜ | 32⅝ | 47¼ | 31⅝ | 48⅝ | 40 | 48 | 37⅜ |
| Standard of Ohio, com. | 100 | 308 | •308 | 362 | 292½ | 369 | 338 | 337½ | 277 |
| Swan & Finch, com. | 25 | •16 | •16 | 21 | 18 | 27 | 12 | 28 | 20 |
| Vacuum Oil | 25 | 101½ | 101½ | 109¾ | 94⅛ | 109½ | 80½ | 83½ | 50⅛ |
| **Miscellaneous** | | | | | | | | | |
| Gulf Oil Corp. of Pa. | 25 | 86 | 87 | 93⅜ | 82½ | 98¼ | 63½ | 67⅜ | 56 |
| Tide Water Associated | .. | 24⅜ | 24⅝ | 27 | 21 | .. | .. | .. | .. |

•Bid, no sales. ‡Old stocks. †New stocks.

The Oil and Gas Journal's weekly average price of 20 representative petroleum stocks listed on the New York Stock Exchange was as follows:

| | | | | | | |
|---|---|---|---|---|---|---|
| June 14 | 59.40 | May 10 | 57.08 | Apr. 5 | 56.78 |
| June 7 | 58.92 | May 3 | 57.23 | Mar. 29 | 56.18 |
| May 28 | 59.81 | Apr. 26 | 57.39 | Mar. 22 | 56.96 |
| May 24 | 58.84 | Apr. 19 | 55.63 | Mar. 15 | 56.34 |
| May 17 | 57.63 | Apr. 12 | 56.07 | Mar. 8 | 55.02 |

# REFINERY AND CRUDE PRICES

**Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields**

## GASOLINE AND NAPHTHA

| | June 15 | | June 8 | | June 1 | |
|---|---|---|---|---|---|---|
| **OKLAHOMA (Group 3)—** | | | | | | |
| 50 52 450 end point | .11¼ | | .11¼ | | .11¼ | .11½ |
| 56-58 450 end point | .11¼ | .11½ | .11¼ | .11⅜ | .11½ | .11⅝ |
| 58 60 450 end point | .11½ | | .11⅜ | .11½ | .11⅝ | .11¾ |
| 58-60 437 end point (U. S. Motor) | .11½ | .11¾ | .11½ | .11¾ | .11¾ | .12 |
| 60 62 400 end point | .12 | | .11⅞ | .12 | .12 | .12¼ |
| 64-66 375 end point | .12¼ | .12½ | .12¼ | .12½ | .12¾ | .13 |
| 68-70 360 end point | .12¾ | .13 | .12¾ | .13 | .13¼ | .13½ |
| **KANSAS—** | | | | | | |
| 58 60 437 end point (U. S. Motor) | .12 | .12⅛ | .12 | | .12¼ | .12½ |
| **NORTH TEXAS—** | | | | | | |
| 48-50 450 end point (Naphtha) | .11 | .11⅛ | .11 | .11⅛ | .11 | .11⅛ |
| 50-52 450 end point (Naphtha) | .11 | .11¼ | .11 | .11⅛ | .11⅛ | .11¼ |
| 56-58 450 end point | .11¼ | .11⅜ | .11⅛ | .11⅜ | .11¼ | .11½ |
| 58 60 437 end point (U. S. Motor) | .11½ | .11⅝ | .11½ | .11⅝ | .11¾ | .12 |
| 60-62 400 end point | .12 | .12⅛ | .11¾ | .12 | .12 | .12⅛ |
| 64-66 390 end point | .12¼ | | .12 | .12¼ | .12¼ | .12⅜ |
| 64-66 375 end point | .12⅜ | .12½ | .12¼ | | .12¾ | .12⅞ |
| 68-70 360 end point | .12¾ | | .12⅞ | .12⅞ | .13 | .13¼ |
| **NORTH LOUISIANA—** | | | | | | |
| 58 60 437 end point (U. S. Motor) | .12 | .12¼ | .12¼ | .12½ | .12 | .12¼ |
| 64-66 375 end point | .13 | .13¼ | .13 | .13¼ | .13 | .13¼ |
| **ARKANSAS—** | | | | | | |
| 58 60 450 end point | .12 | .12¼ | .12¼ | .12½ | .12 | .12⅛ |
| 58-60 437 end point (U. S. Motor) | .12¼ | .12½ | .12½ | .12⅝ | .12¼ | .12½ |
| 64-66 375 end point | .13 | .13¼ | .13 | .13¼ | .13 | .13¼ |
| **ROCKY MOUNTAIN STATES—** | | | | | | |
| *58 60 437 end point (U. S. Motor) | .14½ | .14¾ | .14½ | .14¾ | .14¾ | .15 |
| **PENNSYLVANIA—** | | | | | | |
| 52 Naphtha | .13½ | .13¾ | .13½ | .13¾ | .13½ | .13¾ |
| 54 Naphtha | .13¾ | .14 | .13¾ | .14 | .13¾ | .14 |
| 56 Naphtha | .14 | .14¼ | .14 | .14¼ | .14 | .14¼ |
| 58 Naphtha | .14½ | .14¾ | .14½ | .14¾ | .14½ | .14¾ |
| 60 Gasoline | .14¾ | .15 | .14¾ | .15 | .14¾ | .15 |
| 62 Gasoline | .15 | .15¼ | .15 | .15¼ | .15 | .15¼ |
| 64 Gasoline | .15¼ | .15½ | .15¼ | .15½ | .15¼ | .15½ |
| 66 Gasoline | .16 | .16¼ | .16 | .16¼ | .16 | .16¼ |
| 68-70 Gasoline | .18¾ | .19 | .18¾ | .19 | .19½ | .20 |
| **CALIFORNIA—** | | | | | | |
| 54-58 437 end point (U. S. Motor) domestic | .12½ | .13 | .12½ | .13 | .12½ | .13 |
| **CHICAGO DISTRICT (Based on Group 3)—** | | | | | | |
| 50 52 450 end point (Naphtha) | .11¼ | | .11¼ | .11½ | .11⅜ | .11½ |
| 56-58 450 end point | .11¼ | .11⅜ | .11½ | .11⅝ | .11½ | .11⅝ |
| 58 60 437 end point (U. S. Motor) | .11¾ | | .11¾ | | .12 | |
| 60-62 400 end point | .12 | .12⅛ | .12 | .12⅛ | .12¼ | .12½ |
| 64-66 375 end point | .12¼ | .12½ | .12½ | | .12¾ | .13 |
| 68-70 360 end point | .12¾ | .13 | .13 | .13⅛ | .13¼ | .13½ |

*Colorado points.

## NATURAL GASOLINE

| | June 15 | | June 8 | | June 1 | |
|---|---|---|---|---|---|---|
| **OKLAHOMA (Group 3)—** | | | | | | |
| Grade AA, 80 87.9, 375 e.p., rec. 90% | .09¼ | | .09¾ | .09⅞ | .10¼ | .10⅜ |
| Grade A, 72-79.9, 375 e.p., rec. 90% | .09¼ | | .09¾ | .10 | .10¼ | .10⅜ |
| Grade BB, 84 92, 375 e.p., rec. 85% | .09 | .09⅛ | .09½ | | .10 | .10¼ |
| Grade B, 76-83.9, 375 e.p., rec. 85% | .09 | .09⅛ | .09½ | | .10 | .10¼ |
| Grade C, 80 90, 375 e.p., rec. 78% | .09 | | .09¼ | .09½ | .09¾ | |
| **NORTH TEXAS—** | | | | | | |
| Grade AA, 80-87.9, 375 e.p., rec. 90% | .09¼ | | .09¾ | .09⅞ | .10¼ | .10⅜ |
| Grade A, 72-79.9, 375 e.p., rec. 90% | .09¼ | | .09¾ | .09⅞ | .10¼ | .10⅜ |
| Grade BB, 84-92, 375 e.p , rec. 85% | .09 | | .09½ | .09⅝ | .10 | .10¼ |
| Grade B 76-83.9, 375 e.p., rec 85% | .09 | .09⅛ | .09½ | .09⅝ | .10 | .10¼ |
| Grade C, 80 90, 375 e.p., rec. 78% | .08⅞ | .09 | .09½ | | .09⅝ | .09¾ |
| **NORTH LOUISIANA—** | | | | | | |
| Grade A, 72-79.9, 375 e.p., rec. 90% | .10¼ | | .10¾ | .11 | .10¾ | .11 |
| Grade B, 76-83.9, 375 e.p., rec. 85% | .10 | .10¼ | .10¼ | .10½ | .10½ | .10¾ |
| Grade C, 80 90, 375 e.p , rec. 78% | .10 | | .10⅜ | .10½ | .10¼ | .10½ |
| **CALIFORNIA—** | | | | | | |
| 78-85 absorption, 360-390 end point | .16 | .16½ | .15½ | .16 | .15½ | .16 |
| 78 84 compression, 350 end point | .16 | .16½ | .15½ | .16 | .15½ | .16 |
| **CHICAGO DISTRICT (Based on Group 3)—** | | | | | | |
| Grade AA, 80-87.9, 375 e.p , rec. 90% | .09¼ | .09⅜ | .09⅞ | .10 | .10¼ | .10½ |
| Grade A, 72 79.9, 375 e.p., rec. 90% | .09¼ | .09⅜ | .09⅞ | .10 | .10¼ | .10½ |
| Grade BB, 84-92, 375 e.p., rec. 85% | .09 | .09¼ | .09¼ | .09¾ | .10 | .10¼ |
| Grade B, 76-83.9, 375 e.p., rec 85% | .09 | .09¼ | .09¼ | .09¾ | .10 | .10¼ |
| Grade C, 80-90, 375 e.p., rec. 78% | .09 | | .09½ | | .09¾ | .10 |

## MOTOR NATURAL GASOLINE (BLENDS)

| | June 15 | | June 8 | | June 1 | |
|---|---|---|---|---|---|---|
| **OKLAHOMA (Group 3)—** | | | | | | |
| 60-62 450 end point | .11¼ | .11½ | .11¼ | .11½ | .11½ | .11⅝ |
| 64 66 437 end point | .11½ | | .11¼ | .11½ | .11½ | .11⅝ |
| **NORTH TEXAS—** | | | | | | |
| 64-66 437 end point | .11¼ | .11⅜ | .11¼ | | .11⅜ | .11½ |
| **PENNSYLVANIA—** | | | | | | |
| *60 62 | .13¾ | .14 | .13¾ | .14 | .13¾ | .14 |
| *64-66 | .14 | .14¼ | .14 | .14¼ | .14 | .14¼ |
| *66-68 | .14 | .14¼ | .14 | .14¼ | .14 | .14¼ |
| *68-70 | .14¼ | .14½ | .14¼ | .14½ | .14¼ | .14½ |
| **CHICAGO DISTRICT (Based on Group 3)—** | | | | | | |
| 60-62 450 end point | .11¼ | | .11¼ | .11⅝ | .11¼ | .11⅝ |
| 64 66 437 end point | .11½ | .11¾ | .11½ | .11¾ | .11½ | .11⅞ |

*At Sistersville, W. Va.

## BURNING OIL

| | June 15 | | June 8 | | June 1 | |
|---|---|---|---|---|---|---|
| **KANSAS—** | | | | | | |
| 41-43 water white Kerosene | .08½ | .08¾ | .09½ | | .10⅛ | .10¼ |
| **OKLAHOMA (Group 3)—** | | | | | | |
| 41-43 water white Kerosene | .08 | | .09 | .09⅛ | .09⅞ | .10 |
| 42 44 water white Kerosene | .08½ | .09 | .09¼ | .09½ | .10⅛ | .10⅜ |
| **NORTH LOUISIANA—** | | | | | | |
| 41-43 prime white Kerosene | .09⅛ | .09⅜ | .09½ | .09¾ | .10 | .10¼ |
| **ROCKY MOUNTAIN STATES—** | | | | | | |
| *40-41 water white Kerosene | .11 | .11⅛ | .12 | .12⅛ | .12⅞ | .13 |
| **NORTH TEXAS—** | | | | | | |
| 41-43 water white Kerosene | .08⅛ | .08¼ | .08⅞ | .09 | .09½ | .09¾ |
| **ARKANSAS—** | | | | | | |
| 41-43 water white Kerosene | .08¾ | .09 | .09½ | | .10¼ | .10½ |
| **PENNSYLVANIA—** | | | | | | |
| 43 Kerosene prime white | .11 | .11¼ | .11¾ | .12 | .12 | .12¼ |
| 45 Kerosene water white | .11¼ | .11½ | .12 | .12¼ | .12¼ | .12½ |
| 46 Kerosene water white | .12 | .12¼ | .12½ | .12¾ | .12¾ | .13 |
| 47 Kerosene water white | .12¾ | .13 | .13 | .13¼ | .13½ | .13⅝ |
| 34 Neutral | .08 | .08¼ | .08 | .08¼ | .08 | .08¼ |
| 34 Sundebloom Neutral | .09 | .09¼ | .09 | .09¼ | .09 | .09¼ |
| 36 Miners' Neutral | .07¼ | .07½ | .07¼ | .07½ | .07¼ | .07½ |
| 300 Mineral Seal | .08½ | | .08½ | | .08½ | |
| **CALIFORNIA—** | | | | | | |
| 38-40 water white (high burning test) | .07½ | .08½ | .07½ | .08½ | .07½ | .08½ |
| Engine distillate, 43-45 445 end point | .10¼ | .10½ | .10¼ | .10½ | .10¼ | .10½ |
| Engine distillate. 42-44 450 end point | .10 | .10¼ | .10 | .10¼ | .10 | .10¼ |
| **CHICAGO DISTRICT (Based on Group 3)—** | | | | | | |
| 41-43 water white Kerosene | 08 | .08½ | .09 | .09¼ | .10 | .10¼ |
| 42-44 water white Kerosene | .08¾ | .09 | .09¼ | .09½ | .10¼ | .10½ |

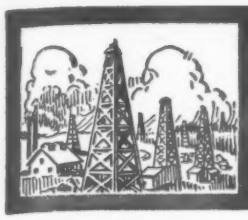
*Colorado points.

## FUEL OILS

| | June 15 | | June 8 | | June 1 | |
|---|---|---|---|---|---|---|
| **KANSAS—** | | | | | | |
| 24-26 Fuel Oil | 1.25 | 1.30 | 1.32½ | 1.35 | 1.35 | |
| 32 36 Gas Oil | .04¼ | .04⅜ | .04¼ | .04⅜ | .04¼ | .04⅜ |
| 38-40 Distillate | .04½ | .04⅝ | .04½ | .04⅝ | .04½ | .04⅝ |
| **OKLAHOMA (Group 3)—** | | | | | | |
| Below 22 Fuel Oil (sellers' cars) | 1.20 | | 1.22½ | 1.25 | 1.22½ | 1.25 |
| 22-26 Fuel Oil (sellers' cars) | 1.20 | 1.25 | 1 25 | | 1 25 | 1.27½ |
| 24 26 Fuel Oil (sellers' cars) | 1.25 | | 1.27½ | 1.32½ | 1.27½ | 1.32½ |
| 26-30 Fuel Oil (sellers' cars) | 1.27½ | 1.30 | 1.32½ | 1.35 | 1.35 | 1.37½ |
| 28-30 Fuel Oil (sellers' cars) | 1.32½ | 1.35 | 1.40 | | 1 45 | |
| 32-36 Gas Oil (cracking stock) | .04 | .04¼ | .04 | .04⅛ | .04⅛ | .04¼ |
| 36 38 Distillate | .04¼ | .04⅜ | .04¼ | .04⅜ | .04¼ | .04⅜ |
| 38-40 Straw Distillate | .04⅜ | .04½ | .04½ | | .04⅜ | .04⅝ |
| **NORTH TEXAS—** | | | | | | |
| 24 26 Fuel Oil (sellers' cars) | 1.25 | 1.30 | 1.30 | | 1.30 | 1.35 |
| 32-36 Gas Oil (straw) | .04 | .04¼ | .03⅞ | .04 | .03¾ | .04 |
| 38-40 Straw Distillate | .04¼ | | .04 | .04¼ | .04 | .04¼ |
| **NORTH LOUISIANA—** | | | | | | |
| 18-20 Fuel Oil | 1.30 | 1.35 | 1.35 | 1.40 | 1.25 | 1.30 |
| 32-36 Gas Oil | .04¼ | .04⅜ | .04¼ | .04½ | .04 | .04¼ |
| 36 38 Distillate | .04½ | .04⅝ | .04½ | .04¾ | .04½ | .04¾ |
| **ARKANSAS—** | | | | | | |
| 38-40 Distillate | .04⅝ | .04¾ | .04⅝ | .04¾ | .04⅝ | .04¾ |
| 32-36 Gas Oil | .04¼ | .04½ | .04¼ | .04½ | .04⅛ | .04⅜ |
| 16 20 Refinery Fuel Oil | 1.20 | 1.25 | 1.20 | 1 25 | 1.17½ | 1.20 |
| **GULF COAST (South Texas)—** | | | | | | |
| Gas Oil | .05½ | .05¾ | .05½ | .05¾ | .05½ | .05¾ |
| Fuel Oil | 1.75 | 1.85 | 1.75 | 1.85 | 1.75 | 1.85 |
| **PENNSYLVANIA—** | | | | | | |
| 30-34 Fuel Oil | .06 | .06¼ | .06¼ | .06½ | .06¼ | .06½ |
| 36-40 Fuel Oil | .06½ | .06¾ | .07 | .07¼ | .07 | .07¼ |
| **CALIFORNIA—** | | | | | | |
| 33 35 Distillate | .04¾ | .05 | .04¾ | .05 | .04¾ | .05 |
| 27-35 Distillate | .04 | .04½ | .04 | .04½ | 04 | .04½ |
| 15-20 Fuel Oil (at tide water) | 1.00 | 1.04 | 1.00 | 1.04 | 1.00 | 1.04 |
| 27 plus Diesel | 1.15 | 1.19 | 1.15 | 1.19 | 1.15 | 1.19 |
| **CHICAGO DISTRICT (Based on Group 3)—** | | | | | | |
| 24-26 Fuel Oil (sellers' cars) Group 3 | 1.27½ | 1 32½ | 1.30 | 1.35 | 1.30 | 1.35 |
| 22-26 Fuel Oil (sellers' cars) | 1.25 | 1.27½ | 1.25 | 1.30 | 1.27½ | 1.30 |
| 18-22 (El Dorado) | 1.20 | 1.25 | 1.20 | 1.25 | 1.25 | 2.27½ |
| 18-20 (Smackover) | 1.20 | 1.22½ | 1.20 | | 1.20 | 1.22½ |
| 32 36 Gas Oil | .04 | .04¼ | .04 | .04⅛ | .04 | .04¼ |
| 36-38 Distillate | .04¼ | | .04¼ | .04½ | .04¼ | .04⅜ |
| 38 40 Straw Distillate | .04½ | .04¾ | .04½ | .04¾ | .04⅜ | .04½ |

## LUBRICATING OILS AND WAX

| | June 15 | | June 8 | | June 1 | |
|---|---|---|---|---|---|---|
| **OKLAHOMA (Group 3)—** | | | | | | |
| 70-80 vis., 2½ color, 20-25 cold test | .06 | .07 | .06 | .07 | .06 | .07 |
| 100 vis., 3 color, 20 25 cold test | .06½ | .07 | .06½ | .07 | .06½ | .07 |
| 100 vis., 2 color, 20-25 cold test | .07 | .07½ | .07 | .07½ | .07 | .07½ |
| 150 vis., 4 color, 20-25 cold test | .09¼ | .09¾ | .09¼ | .09¾ | .09¼ | .09¾ |
| 150 vis., 3 color, 20-25 cold test | .09½ | .10 | .09½ | .10 | .09½ | .10 |
| 180 vis., 4 color, 23-28 cold test | .10 | .10½ | .10 | .10½ | .10 | .10½ |
| 180 vis., 3 color, 23-28 cold test | .10¼ | .10½ | .10¼ | .10½ | .10¼ | .10½ |
| 200 vis., 4 color, 23 28 cold test | .11 | .11½ | .11 | .11½ | .11 | .11½ |
| 200 vis., 3 color, 23 28 cold test | .11¼ | .11½ | .11¼ | .11½ | .11¼ | .11½ |
| 220 vis., 4 color, 25-30 cold test | .14 | .14½ | .14 | .14½ | .14 | .14½ |
| 220 vis., 3 color, 25-30 cold test | .14½ | .15 | .14½ | .15 | .14½ | .15 |
| 240 vis., 4 color, 25 30 cold test | .14 | .14½ | .14 | .14½ | .14 | .14½ |
| 240 vis., 3 color, 25-30 cold test | .14½ | .15 | .14½ | .15 | .14½ | .15 |
| 280 vis., 4 color, 25-30 cold test | .15½ | .16 | .15½ | .16 | .15½ | .16 |
| 280 vis., 3 color, 25 30 cold test | .16½ | .17 | .16½ | .17 | .16½ | .17 |
| 180 vis., 5 color, 23-28 cold test | .09¾ | .10¼ | .09¾ | .10¼ | .09¾ | .10¼ |
| 200 vis., 5 color, 23-28 cold test | .10¾ | .11¼ | .10¾ | .11¼ | .10¾ | .11¼ |
| 220 vis., 5 color, 25-30 cold test | .14 | .14½ | .14 | .14½ | .14 | .14½ |
| 240 vis., 5 color, 25-30 cold test | .13 | .14 | .13 | .14 | .13 | .14 |
| 280 vis., 5 color, 25-30 cold test | .15½ | .16 | .15½ | .16 | .15½ | .16 |
| Cylinder Stocks: | | | | | | |
| 180-200 vis., S. R. green, 40 45 cold test | .08½ | .11 | .08½ | .11 | .08½ | .11 |
| 190-200 vis , S. R. green, 40-45 cold test | .08 | .08½ | .08 | .08½ | .08 | .08½ |
| 170 190 dark green, 40-45 cold test | .06 | .06½ | .06 | .06½ | .06 | .06½ |
| 190-200 vis. & 210 "D" Bright Stock | .33 | .35 | .33 | .35 | .33 | .35 |
| 190-200 vis. @ 210 "D" Bright Stock | .33 | .35 | .33 | .35 | .33 | .35 |
| 150 vis. @ 210 "E" Bright Stock | .27 | .28 | .27 | .28 | .27 | .28 |
| 150 vis. @ 210 "D" Bright Stock | .28 | .31 | .28 | .31 | .28 | .31 |
| Waxes: | | | | | | |
| 122-124 White Crude Scale Wax | .04¾ | .04⅞ | .04¾ | | .04¾ | .04⅞ |



# REFINERY AND CRUDE PRICES

**Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields**

| | | | | | | |
|---|---|---|---|---|---|---|
| **PENNSYLVANIA—** | | | | | | |
| 150, 3 color | .25½ | | .25½ | | .25½ | |
| 180, 3 color | .28½ | | .28½ | | .27½ | |
| 200, 3 color | .30½ | | .30½ | | .29½ | |
| 220, 3 color | .32 | | .30 | | .30 | |
| 600, steam refined | .15¾ | | .15¾ | | .15¾ | |
| 635, steam refined | .20 | | .20 | | .20 | |
| 650, steam refined | .21 | | .21 | | .21 | |
| 600, Pennsylvania flash | .26½ | | .26½ | | .26½ | |
| 630, Pennsylvania flash | .34 | | .34 | | .34 | |
| *550, E filtered | .19¼ | | .19½ | | .19½ | |
| 600, E filtered | .20 | | .20¼ | | .20¼ | |
| *600, E filtered | .21 | | .21¼ | | .21¼ | |
| 600, D filtered | .26¾ | | .26¾ | | .26¾ | |
| 550, E filtered | .18½ | .18¾ | .18½ | .18¾ | .18½ | .18¾ |
| 550, D filtered | .22¼ | .22½ | .22¼ | .22½ | .22¼ | .22½ |
| Pennsylvania Bright Stock | .41 | | .40 | | 40 | |
| 122-124 White Crude Scale Wax | .05⅛ | .05¼ | .05⅛ | .05¼ | .05¼ | .05¼ |
| †124-126 White Crude Scale Wax | .05¼ | .05⅜ | .05¼ | .05⅜ | .05¼ | .05⅜ |
| **GULF COAST (South Texas)—** | | | | | | |
| Zero Black | .06 | .07 | .06 | .07 | .06 | .07 |
| No. 2 color, 100 vis., pale oil | .07½ | .08 | .08 | .08½ | .08 | .08½ |
| No. 3 color, 200 vis., pale oil | .11½ | .12 | .12 | .12½ | .12 | .12½ |
| No. 3½ color, 300 vis., pale oil | .12½ | .13½ | .13½ | .14 | .13½ | .14 |
| No. 3¾ color, 500 vis., pale oil | .14½ | .15½ | .15½ | .16 | .15½ | .16 |
| No. 4 color, 750 vis., pale oil | .18½ | .19½ | .19½ | .20½ | .19½ | .20½ |
| No. 2 plus color, 200 vis., pale filtered | .21½ | | .22 | | .22 | |
| No. 2 color, 300 vis., pale filtered | .24½ | | .25 | | .25 | |
| No. 2½ color, 500 vis., pale filtered | .27½ | | .28 | | .28 | |
| No. 2½ color, 750 vis., pale filtered | .35½ | | .36 | | .36 | |
| No. 5 to 6 color, 200 vis., red oil | .09½ | .10 | .10 | .10½ | .10 | .10½ |
| No. 5 to 6 color, 300 vis., red oil | .11½ | .13 | .12 | .12½ | .12 | .12½ |
| No. 5 to 6 color, 500 vis., red oil | .12½ | .13½ | .13½ | .14 | .13½ | .14 |
| No. 5 to 6 color, 750 vis., red oil | .16¼ | .17½ | .17½ | .18½ | .17½ | .18½ |
| **CALIFORNIA—** | | | | | | |
| 130 pale, 2½-3 color | .10 | .11½ | .10 | .11½ | .10 | .11½ |
| 200 vis., 2½-3 color | .13½ | .14½ | .13½ | .14½ | .13½ | .14½ |
| 300 vis., 3 -3½ color | .15 | .16 | .15 | .16 | .15 | .16 |
| 350 vis., 3½-4 color | .16½ | .17½ | .16½ | .17½ | .16½ | .17½ |
| 400 vis., 3½-4 color | .18 | .19 | .18 | .19 | .18 | .19 |
| Red Neutrals: | | | | | | |
| 200 vis., 4½-5 color | .12 | .13 | .12 | .13 | .12 | .13 |
| 300 vis., 5 -6 color | .13 | .14 | .13 | .14 | .13 | .14 |
| 400 vis., 5 -6 color | .15 | .16 | .15 | .16 | .15 | .16 |
| 500 vis., 4½-5 color | .18 | .19 | .18 | .19 | .18 | .19 |
| 500 vis., 6 -6½ color | .16 | .17 | .16 | .17 | .16 | .17 |
| 600 vis., 6½ plus color | .17 | .18 | .17 | .18 | .17 | .18 |

*At Warren, Pa. †At New York City.

Note: Bright stocks are not manufactured commercially on the Pacific Coast.

## NEW YORK (BAYONNE) REFINERY PRICES

| Gasoline: | June 15 | June 8 | June 1 |
|---|---|---|---|
| U. S. Motor, 58-60 | .15 | .15 | .15 |
| Export, 64-66 | .17 | .17 | .17 |
| Kerosene, prime white | .09⅛ | .09⅛ | .09¼ |
| *Bunker Oil, 14-16, per bbl. | 1.75 | 1.75 | 1.75 |
| *Diesel Oil, 28-30, per bbl. | 2.50 | 2.50 | 2.41½ |
| Gas Oil, 28 plus | .06¾ | .06½ | .06½ |
| Cylinder Oil, light filtered, 600 s.r. | .29 | .29 | .29 |
| Bright Stock, No. 5, 150 vis. at 212 F. | .41 | .41 | .41 |
| White Neutral, No. 1, 170 vis., 1 color | .37 | .37 | .37 |
| Pale Oil, "25," 170 vis., 3½ color | .13 | .13 | .13 |
| Pale Oil, "28" 100 vis., 2 color | .08 | .08 | .08 |
| Red Oil: | | | |
| No. 3, 160 vis., 7 color | .11 | .11 | .11 |
| No. 2, 212 vis., 5½ color | .12 | .12 | .12 |
| No. 1, 265 vis., 5½ color | .13½ | .13½ | .13½ |
| Polar, 295 vis., 6 color | .14 | .14 | .14 |
| Paraffin Wax, refined: | | | |
| 120-122 a.m.p., per lb. | .06 | .06 | .06 |
| 125-127 a.m.p., per lb. | .06⅛ | .06⅛ | .06⅛ |
| 130-132 a.m.p., per lb. | .06½ | .06½ | .06½ |
| 135-137 a.m.p., per lb. | .07 | .07 | .07 |
| Petrolatum, in bbls., per lb.: | | | |
| Amber | .03⅛ | .03⅛ | .03¼ |
| Light amber | .03½ | .03½ | .03½ |
| Cream | .05½ | .05½ | .05½ |
| Lily white | .07¾ | .07¾ | .08 |
| Snow white | .08¾ | .08¾ | .09¼ |

*Lighterage 6.5c a barrel extra.

## NEW YORK CASE EXPORT PRICES

| | June 15 | June 8 | June 1 |
|---|---|---|---|
| Gasoline, U. S. Motor, 58-60 | .29.40 | .29.40 | .29.40 |
| Kerosene: | | | |
| Standard white | .19.40 | .19.40 | .19.15 |
| Water white | .20.40 | .20.40 | .20.40 |

## LOS ANGELES EXPORT PRICES

| | June 15 | | June 8 | | June 1 | |
|---|---|---|---|---|---|---|
| Kerosene water white | .05½ | .06½ | .05½ | .06½ | .05½ | .06½ |
| U. S. Motor Gasoline, 54-56 437 e.p. | .11 | .11¼ | .11 | .11¼ | .11 | .11¼ |

## CRUDE OIL PRICES

**Champlin Refining Co.**
(Garber and Tonkawa)

Schedule based on Prairie Oil & Gas Co. paying 10 cents additional for each grade of crude above 38° gravity.

**Humble Oil & Refining Co.**
(North and East Central Texas, Ranger, Mexia, Powell, Richland, Wortham, Currie, Moran, Big Lake and Lytton Springs)

Same prices as Prairie Oil & Gas Co. schedule.

**Magnolia Petroleum Co.**
(Oklahoma, Kansas and North and East Central Texas, except Corsicana heavy, and Lytton Springs of South Central Texas)

| | |
|---|---|
| Below 28° | $1.30 |
| Other grades same as Prairie Oil & Gas Co. | |
| Iatan | $1.15 |
| Corsicana heavy | 1.25 |
| (Panola County) | |
| 30° to 34.9° | $1.95 |
| 35° to 37.9° | 2.10 |
| 38° and above | 2.25 |

**Texhoma Oil & Refining Co.**
(Wichita Falls, Tex., District)

| | |
|---|---|
| Below 32° | 1.94 |
| 32° to 32.9° | 2.02 |
| 33° to 33.9° | 2.10 |
| 34° to 34.9° | 2.18 |
| 35° to 35.9° | 2.26 |
| 36° to 36.9° | 2.34 |
| 37° to 37.9° | 2.42 |
| 38 to 38.9° | 2.50 |
| 39° to 39.9° | 2.60 |
| 40° to 40.9° | 2.66 |
| 41° to 41.9° | 2.74 |
| 42° to 42.9° | 2.82 |
| 43° to 43.9° | 2.90 |
| 44° and above | 2.98 |

**TEXAS PANHANDLE**
**Kay County Gas Co.**
**Magnolia Petroleum Co.**

| | |
|---|---|
| 28° to 28.9° | $1.35 |
| 29° to 29.9° | 1.40 |
| 30° to 30.9° | 1.45 |
| 31° to 31.9° | 1.50 |
| 32° to 32°9 | 1.55 |
| 33° to 33.9° | 1.60 |
| 34° to 34.9° | 1.65 |
| 35° to 35.9° | 1.70 |
| 36° to 36.9° | 1.75 |
| 37° to 37.9° | 1.80 |
| 38° to 38.9° | 1.85 |
| 39° and above | 1.90 |

**GULF COAST**
***Humble Oil & Refining Co.**

| | |
|---|---|
| Grade A | $1.60 |
| Grade B— | |
| Below 25° | 1.50 |
| 25° to 25.9° | 1.55 |
| 26° to 26.9° | 1.60 |
| 27° to 27.9° | 1.65 |
| 28° to 28.9° | 1.70 |
| 29° to 29.9° | 1.75 |
| 30° to 30.9° | 1.80 |
| 31° to 31.9° | 1.85 |
| 32° to 32.9° | 1.90 |
| 33° to 33.9° | 1.95 |
| 34° to 34.9° | 2.00 |
| 35° and above | 2.05 |
| Sour Lake (36° gravity) (the Texas Company) | 1.79 |
| Boling | 1.50 |
| High Island (The Sun Co.) | 1.40 |

**The Texas Company**

| | |
|---|---|
| Grade A | $1.60 |
| Grade B | 1.50 |
| †Light crude— | |
| 35° to 35.9° | 2.05 |
| 36° to 36.9° | 2.10 |
| 37° to 37.9° | 2.15 |
| 38° to 38.9° | 2.20 |
| 39° to 39.9° | 2.25 |
| 40° and above | 2.30 |

†The Texas Company's postings on light crude under 35° gravity are same as Humble Oil & Refining Co.'s grades and prices for Grade B crude.

*The Sun Pipe Line Co.'s postings same as Humble's.

**SOUTH CENTRAL AND SOUTHWEST TEXAS**

***Magnolia Petroleum Co.**

| | |
|---|---|
| Luling (contract) | $1.30 |
| Mirando (Webb, Jim Hogg and Zapata Counties) | 1.25 |
| Rockdale-Minerva (Milam County) | 1.25 |
| Thrall | 1.00 |
| Calliham (Live Oak and McMullen Counties) | 1.75 |
| ‡Lockhart (Lytton Springs) | |
| **Somerset (Grayburg Pipe Line Co.)** | |
| 28° to 28.9° | 1.25 |
| 29° to 29.9° | 1.35 |
| 30° to 30.9° | 1.71 |
| 31° to 31.9° | 1.89 |
| 32° to 32.9° | 1.97 |
| 33° to 33.9° | 2.05 |
| 34° to 34.9° | 2.13 |
| 35° to 35.9° | 2.20 |
| 36° to 36.9° | 2.29 |
| 37° to 37.9° | 2.37 |
| 38° and above | 2.45 |

*Texpata Pipe Line Co. and Humble Pipe Line Co. also posts in Mirando Field paying same prices as Magnolia Petroleum Co.

‡Lockhart prices same as for North and East Central Texas. Lockhart posted by Magnolia Petroleum Co. and Humble Oil & Refining Co.

**ARKANSAS AND NORTH LOUISIANA**

**Standard Oil Co. of Louisiana**

| | |
|---|---|
| Caddo below 32° | 2.10 |
| 32° to 34.9° | 2.25 |
| 35° to 37.9° | 2.35 |
| 38° and above | 2.45 |
| Homer below 31° | 1.85 |
| 31° to 32.9° | 2.00 |
| 33° to 34.9° | 2.10 |
| 35° and above | 2.20 |
| Haynesville below 33° | 2.00 |
| 33° and above | 2.10 |
| El Dorado below 33° | 2.00 |
| 33° to 34.9° | 2.10 |
| 35° to 36.9° | 2.20 |
| 37° and above | 2.30 |
| Bull Bayou, 32° to 34.9° | 1.95 |
| 25° to 37.9° | 2.10 |
| 38° and above | 2.25 |
| Cotton Valley | 1.20 |
| DeSoto | 2.20 |
| Crichton | 2.10 |
| Bellevue | 1.50 |
| Smackover, below 24° | 1.10 |
| 24° to 24.9° | 1.35 |
| 25° to 25.9° | 1.40 |
| 26° to 26.9° | 1.45 |
| 27° and above | 1.50 |
| *Stephens, Ark., below 26° | 1.45 |
| 26° and above | 1.65 |
| †Calion (East El Dorado) | .95 |
| ‡Urania | 1.15 |

Other companies posting in these fields are: Gulf Pipe Line Co.; Atlantic Oil Producing Co. in Homer, Haynesville, El Dorado and Smackover; The Texas Company in Caddo, Bull Bayou, DeSoto, Crichton and Smackover.

*Posted by the Atlantic Oil Producing Co. †Posted by the Gulf Pipe Line Co. ‡Posted by the Louisiana Oil Refining Corp.

**ROCKY MOUNTAIN STATES**

**Ohio Oil Co.—Midwest Refining Co.**

| | |
|---|---|
| Rock Creek, (Wyo.) | $2.25 |
| Salt Creek— | |
| 29° to 29.9° | 1.73 |
| 30° to 30.9° | 1.81 |
| 31° to 31.9° | 1.89 |
| 32° to 32.9° | 1.97 |
| 33° to 33.9° | 2.05 |
| 34° to 34.9° | 2.13 |
| 35° to 35.9° | 2.21 |
| 36° to 36.9° | 2.29 |
| 37° and above | 2.37 |
| Big Muddy | 2.25 |
| Mule Creek | 1.75 |
| Grass Creek, light | 2.40 |
| Grass Creek, heavy | .90 |
| Elk Basin | 2.40 |
| Lance Creek | 2.40 |
| Rex Lake | 1.45 |
| Osage | 2.40 |
| Lost Solider (contract) | 1.35 |
| Greybull-Torchlight | 2.15 |
| Hamilton Dome | 1.35 |
| Cat Creek (Mont.) | 2.40 |
| Sunburst (Mont.) | 1.05 |
| Florence (Colo.) | 1.60 |
| Artesia | 1.95 |
| Hogback (N. M.) | 2.45 |

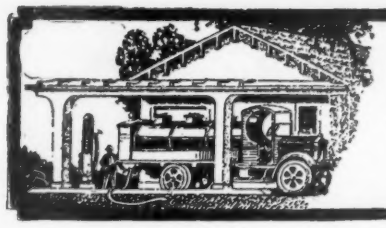
Note: Salt Creek, Osage, Cat Creek, Greybull and Hogback posted by Midwest Refining Co., and the remainder by the Ohio Oil Co. Both companies post Grass Creek light and Elk Basin.

**EASTERN STATES**

**Joseph Seep Purchasing Agency**

Penna Grade Oil in New York Trans-

(Continued on Page 170)



# TANK WAGON MARKETS

Tankwagon quotations for gasoline and kerosene in United States as furnished by the larger marketing concerns, June 15.

## ALL TANK WAGON AND SERVICE STATION QUOTATIONS INCLUDE TAXES

### STANDARD OIL CO. (INDIANA)
**Main Service Station Price**

| | Gasoline — Tank wagon | Gasoline — Service station | Gasoline — Incids tax of | Kero. Tank wagon |
|---|---|---|---|---|
| Chicago Dist.— | | | | |
| †Less than 100 gals. | 19.0 | 21.0 | ... | 15.5 |

Tank wagon prices on April 19, 1922; g. up 1½c; May 8, up 1c; June 27, g. and k. up 1c; July 19, g. down 2c, k. down 1c; Oct. 10, g. down 2c; Oct. 21, g. down 1c; Feb. 5, 1923, g. up 1c; Feb. 20, g. up 1c; Aug. 14, g. down 6.6c; Oct. 4, k. down 1½c; Nov. 10, g. down 1.4c; Dec. 20, g. up 2c; Jan. 12, 1924, g. up 2c; k. up 1c; Feb. 5, g. up 2c, k. 1c; July 18, g. down 1c; July 30, g. and k. down 1c; Sept. 12, g. down 2c; Jan. 23, 1925, g. up 1c; Jan. 26, g. up 1c; Jan. 31, g. up 1c; Feb. 12, g. up 2c, k. up 1c; April 19, g. down 1c; July 14, g. up 1c; Aug. 25, g. down 2c, k. down 1c; Sept. 1, g. down 1c; Feb. 4, 1926, g. up 1c, k. up 1c; April 16, 1926, k. up 1c; April 24, 1926, k. up ½c; April 29, 1926, g. up 1c, k. up ½c; May 6, 1926, k. up ½c May 17, g. and k. up 1c.

| | | | | |
|---|---|---|---|---|
| Decatur, Ill. | 19.2 | 21.2 | ... | 16.0 |
| East St. Louis | 18.1 | 20.35 | ... | 15.1 |
| Joliet | 19.4 | 21.4 | ... | 16.2 |
| Peoria | 19.2 | 21.2 | ... | 16.0 |
| Quincy | 19.2 | 21.2 | ... | 15.8 |
| Davenport, Ia. | 21.5 | 23.5 | 2.0 | 16.4 |
| Des Moines | 21.5 | 23.5 | 2.0 | 16.4 |
| Keokuk | 21.5 | 23.5 | 2.0 | 16.4 |
| Sioux City | 21.0 | 23.0 | 2.0 | 16.0 |
| Duluth, Minn. | 22.5 | 24.5 | 2.0 | 17.1 |
| Minneapolis | 22.2 | 24.2 | 2.0 | 17.1 |
| La Crosse, Wis. | 22.2 | 24.2 | 2.0 | 16.9 |
| Milwaukee | 21.1 | 23.1 | 2.0 | 15.8 |
| Madison | 21.3 | 23.3 | 2.0 | 16.0 |
| Detroit, Mich. | 21.8 | 23.8 | 2.0 | 16.7 |
| Grand Rapids | 21.7 | 23.7 | 2.0 | 16.6 |
| Saginaw | 21.9 | 23.9 | 2.0 | 16.8 |
| Evansville, Ind. | 22.0 | 24.0 | 3.0 | 16.0 |
| Fort Wayne | 22.4 | 24.4 | 3.0 | 16.4 |
| Indianapolis | 22.2 | 24.2 | 3.0 | 16.2 |
| South Bend | 22.4 | 24.4 | 3.0 | 16.4 |
| Fargo, N. D. | 22.9 | 24.9 | 1.0 | 19.1 |
| Huron, S. D. | 22.0 | 24.0 | 3.0 | 17.6 |
| Sioux Falls | 22.0 | 24.0 | 3.0 | 17.1 |
| *K. C., Mo. | 21.9 | 23.9 | 3.0 | 14.8 |
| *Springfield | 21.8 | 23.8 | 3.0 | 15.7 |
| *St. Louis | 20.6 | 22.9 | 2.5 | 15.5 |
| *St. Joseph | 21.0 | 23.0 | 2.5 | 15.4 |
| ‡Wichita, Kan. | 19.8 | 21.8 | 2.0 | 15.4 |
| Bartlesville, Ok. | 20.8 | 22.8 | 3.0 | 15.3 |
| Lake Charles | 20.5 | 23.5 | 2.0 | 16.0 |
| Shreveport, La. | 19.0 | 22.0 | 2.0 | 15.0 |
| Memphis, Tenn. | 21.5 | 24.5 | 3.0 | 17.0 |
| Chattanooga | 23.5 | 26.5 | 3.0 | 17.5 |
| Knoxville | 23.5 | 26.5 | 3.0 | 18.0 |
| Nashville | 22.5 | 25.5 | 3.0 | 18.0 |
| Bristol | 24.0 | 27.0 | 3.0 | 17.5 |
| Little Rock Ark | 22.0 | 25.0 | 4.0 | 16.5 |

*State tax is 2c. Remainder is city tax.
†Quantity price on more than 100 gallons, 18.0.
‡At all Kansas points a discount of 1 cent a gallon is allowed from the tank wagon postings on dumps of 50 gallons or more.

The following monthly rebate system is effective on tank wagon schedules throughout the territory of Standard Oil Co. of Indiana: Over 750 gallons, ½c; over 2,000 gallons, ¾ cent; over 3,000 gallons, 1 cent; over 6,000 gallons, 1½ cents; over 10,000 gallons, 2 cents. If quantity bought during the year is equal to 12 times the monthly agreed purchases the discount will be paid or credited on the entire quantity less monthly payments. Service station customers will receive discount of 1 cent a gallon on purchases amounting to 200 gallons a month or 2,400 gallons a year; and 2 cents a gallon on 600 gallons a month or 7,200 gallons a year.

### SOUTHWESTERN DISTRICT
***Magnolia Petroleum Co.**

| | Gasoline — Tank wagon | Gasoline — Service station | Gasoline — Incids tax of | Kero. Tank wagon |
|---|---|---|---|---|
| Dallas, Tex. | 20.0 | 1.0 | | 15.0 |
| Fort Worth | 20.0 | 1.0 | | 15.0 |
| Houston | 20.0 | 1.0 | | 15.0 |
| San Antonio | 20.0 | 1.0 | | 15.0 |
| El Paso | 21.0 | 1.0 | | 16.0 |
| Texarkana, Tex. | 20.5 | 1.0 | | 15.0 |
| Muskogee, Ok. | 20.0 | 23.0 | 3.0 | 16.0 |
| Oklahoma City | 20.0 | 23.0 | 3.0 | 16.0 |
| Tulsa | 20.0 | 24.0 | 3.0 | 16.0 |
| Little Rock | 22.0 | 25.0 | 4.0 | 16.5 |
| Ft. Smith, Ark. | 22.0 | 25.0 | 4.0 | 16.5 |

*The following is the schedule of discounts on quantity gasoline sales adopted by the Magnolia Petroleum Co. in Oklahoma: Over 750 gallons a month, ½ cent; over 2,000 gallons, ¾ cent; over 3,000 gallons, 1 cent; over 4,500 gallons, 1¼ cents; over 6,000 gallons, 1½ cents; over 8,000 gallons 1¾ cents; over 10,000 gallons, 2 cents. If the quantity bought during the year is 12 times the monthly agreed purchases, the discount will be paid or credited on the entire quantity for the year less any monthly purchases.

The schedule on service station deliveries is: Over 200 gallons a month, 1 cent; over 300 gallons a month 1¼ cents; over 400 gallons, 1½ cents; over 500 gallons, 1¾ cents; over 600 gallons, 2 cents. The same rule applies for annual purchases as in the tank wagon discounts.

In Texas a flat 3-cent discount only from the retail schedule is allowed dealers and large consumers. There is no tankwagon schedule.

### CENTRAL SOUTH DISTRICT
**Standard Oil Co. (Louisiana)**

| | Gasoline — Tank wagon | Gasoline — Service station | Gasoline — Incids tax of | Kero. Tank wagon |
|---|---|---|---|---|
| *New Orleans | 20.5 | 23.5 | 3.0 | 15.0 |
| Alexandria | 20.0 | 23.0 | 2.0 | 16.0 |
| Baton Rouge | 19.0 | 22.0 | 2.0 | 14.5 |
| LaFayette | 20.0 | 23.0 | 2.0 | 15.5 |

*Tax of 3 cents includes city tax of 1 cent.

### SOUTHERN DISTRICT
**Standard Oil Co. (Kentucky)**

| | Gasoline — Tank wagon | Gasoline — Service station | Gasoline — Incids tax of | Kero. Tank wagon |
|---|---|---|---|---|
| Atlanta, Ga. | 25.0 | 28.0 | 3.5 | 20.0 |
| Augusta | 25.0 | 28.0 | 3.5 | 20.0 |
| Macon | 25.0 | 28.0 | 3.5 | 20.0 |
| Savannah | 23.0 | 25.0 | 3.5 | 18.0 |
| Birm'gham, Ala | 22.0 | 25.0 | 2.0 | 19.5 |
| Mobile | 21.0 | 24.0 | 2.0 | 18.0 |
| *Montgomery | 23.0 | 26.0 | 3.0 | 20.5 |
| Clarksdale, Miss | 23.0 | 26.0 | 4.0 | 17.5 |
| Jackson | 23.0 | 26.0 | 4.0 | 16.5 |
| Natchez | 22.5 | 25.5 | 4.0 | 17.0 |
| Vicksburg | 22.5 | 25.5 | 4.0 | 17.0 |
| Jack'ville, Fla. | 23.0 | 26.0 | 4.0 | 18.0 |
| Miami | 25.0 | 28.0 | 4.0 | 19.5 |
| Pensacola | 23.0 | 25.0 | 4.0 | 18.5 |
| Tampa | 23.0 | 26.0 | 4.0 | 18.0 |
| Covington | 24.0 | 27.0 | 5.0 | 19.0 |
| Louisville | 25.0 | 28.0 | 5.0 | 18.0 |
| Lexington, Ky. | 25.0 | 28.0 | 5.0 | 19.0 |

*In addition to the state tax of 2 cents on gasoline, Montgomery has city tax of 1 cent on gasoline and ½ cent on kerosene. Prices in Georgia include ½ cent inspection fee on gasoline and kerosene: in Florida, an inspection fee of 0.125 cent; in Alabama, an inspection fee of ½ cent on kerosene only.

### ATLANTIC COAST DISTRICT
**Standard Oil Co. (New Jersey)**

| | Gasoline — Tank wagon | Gasoline — Service station | Gasoline — Incids tax of | Kero. Tank wagon |
|---|---|---|---|---|
| Atlantic City | 19.0 | ... | ... | 16.0 |
| Newark, N. J. | 19.0 | 21.0 | ... | 16.0 |
| Anapolis, Md. | 21.0 | ... | 2.0 | 16.0 |
| Baltimore | 21.0 | 24.0 | 2.0 | 16.0 |
| Cumberland | 21.0 | 24.0 | 2.0 | 16.0 |
| Washington | 21.0 | 24.0 | 2.0 | 16.0 |
| Danville, Va. | 23.5 | .... | 4.5 | 16.0 |
| Norfolk | 23.5 | 26.5 | 4.5 | 16.0 |
| Petersburg | 23.5 | 26.5 | 4.5 | 16.0 |
| Roanoke | 23.5 | 26.5 | 4.5 | 16.0 |
| Richmond | 23.5 | 26.5 | 4.5 | 16.0 |
| Charleston, W. Va. | 22.5 | 25.5 | 3.5 | 16.0 |
| Keyser | 22.5 | .... | 3.5 | 16.0 |
| Parkersburg | 22.5 | 22.5 | 3.5 | 16.0 |
| Wheeling | 22.5 | 25.5 | 3.5 | 16.0 |
| Charlotte, N. C. | 23.5 | 26.5 | 4.0 | 16.0 |
| Hickory | 23.5 | .... | 4.5 | 16.0 |
| Mt. Airy | 23.5 | 26.5 | 4.0 | 16.0 |
| Salisbury | 23.5 | 26.5 | 4.0 | 16.0 |
| Charleston, S.C. | 24.5 | 27.5 | 5.0 | 16.0 |
| Columbia | 24.5 | 27.5 | 5.0 | 16.0 |

### NEW YORK AND PART OF NEW ENGLAND DISTRICT
**Standard Oil Co. (New York)**

| | Gasoline — Tank wagon | Gasoline — Service station | Gasoline — Incids tax of | Kero. Tank wagon |
|---|---|---|---|---|
| Albany, N. Y. | 21.0 | .... | ... | 17.0 |
| *New York | 21.0 | .... | ... | 17.0 |
| Buffalo | 21.0 | .... | ... | 17.0 |
| Rochester | 21.0 | .... | ... | 17.0 |
| Syracuse | 21.0 | .... | ... | 17.0 |
| Boston, Mass. | 21.0 | .... | ... | 17.0 |
| Providence, R.I. | 22.0 | .... | 1.0 | 17.0 |
| Augusta, Me. | 24.0 | .... | 3.0 | 17.0 |
| Manchester, N. H. | 23.0 | .... | 2.0 | 17.0 |
| Burlington, Vt. | 23.0 | .... | 2.0 | 17.0 |

*Price in steel barrels.
Note: Standard Oil Co. of New York does not generally quote service station price in its territory. In most cases the service station price is 2 or 3 cents higher than tank wagon price.

### PENNSYLVANIA-DELAWARE AND PART NEW ENGLAND
**Atlantic Refining Co.**

| | Gasoline — Tank wagon | Gasoline — Service station | Gasoline — Incids tax of | Kero. Tank wagon |
|---|---|---|---|---|
| *Pittsburgh, Pa. | 20.0 | 25.0 | ... | 17.0 |
| *Philadelphia | 20.0 | 25.0 | ... | 17.0 |
| *Scranton | 20.0 | 25.0 | ... | 17.0 |
| *Allentown | 20.0 | 25.0 | ... | 17.0 |
| Altoona | 20.0 | 25.0 | ... | 17.0 |
| *Erie | 20.0 | 25.0 | ... | 17.0 |
| Dover, Del. | 22.0 | 25.0 | 2.0 | 17.0 |
| Wilmington | 22.0 | 25.0 | 2.0 | 17.0 |
| Springf'd, Mass. | 21.0 | 23.0 | ... | 17.0 |
| Worcester | 21.0 | 24.0 | ... | 17.0 |
| Boston | 21.0 | 24.0 | ... | 17.0 |
| Providence, R.I. | 22.0 | 24.0 | 1.0 | 17.0 |
| Hartford, Conn. | 23.0 | 26.0 | 2.0 | 16.0 |
| New Haven | 23.0 | 26.0 | 2.0 | 17.0 |

*Pennsylvania tax of 2 cents is collected by the dealer and paid by him direct to the State.

### OHIO
**Standard Oil Co. (Ohio)**

| | Gasoline — Tank wagon | Gasoline — Service station | Gasoline — Incids tax of | Kero. Tank wagon |
|---|---|---|---|---|
| All Ohio points | 22.0 | 24.0 | 2.0 | 17.0 |

### PACIFIC COAST DISTRICT
**Standard Oil Co. (California)**

| | Gasoline — Tank wagon | Gasoline — Service station | Gasoline — Incids tax of | Kero. Tank wagon |
|---|---|---|---|---|
| San Francisco | 18.0 | 22.0 | 2.0 | 15.5 |
| Los Angeles | 16.5 | 20.5 | 2.0 | 15.5 |
| Fresno | 18.5 | 22.5 | 2.0 | 17.5 |
| Reno, Nev. | 23.5 | 27.5 | 4.0 | 19.0 |
| Portland, Ore. | 19.0 | 23.0 | 3.0 | 16.5 |
| Seattle, Wash. | 18.0 | 22.0 | 2.0 | 16.5 |
| Spokane | 22.0 | 26.0 | 2.0 | 20.5 |
| Tacoma | 18.0 | 22.0 | 2.0 | 16.5 |
| Phoenix, Ariz. | 25.0 | 28.0 | 3.0 | 21.5 |

### CALIFORNIA
***Standard Oil Co.-Union Oil Co.**

| Gravity— | Long Beach Huntington Beach Richfield Brea-Olinda Rosecrans Torrance-Inglewood Domingues | Whittier La Habra Montebello | Kern River Newhall-McKittrick Midway-Sunset Elk Hills Lost Hills Belridge | Coyote | Santa Fe Springs | Coalinga | Wheeler Ridge | Santa Maria Ventura Salt Lake |
|---|---|---|---|---|---|---|---|---|
| 14° | .85 | .85 | .75 | .85 | .... | .75 | .75 | .85 |
| 15° | .87 | .85 | .75 | .85 | .... | .75 | .75 | .85 |
| 16° | .90 | .85 | .75 | .85 | .... | .75 | .75 | .85 |
| 17° | .94 | .85 | .75 | .85 | .... | .75 | .75 | .85 |
| 18° | .98 | .86 | .75 | .86 | .... | .75 | .75 | .85 |
| 19° | 1.04 | .87 | .75 | .87 | .... | .75 | .75 | .85 |
| 20° | 1.10 | .89 | .82 | .90 | .89 | .79 | .78 | .90 |
| 21° | 1.16 | .91 | .90 | .98 | .91 | .86 | .81 | .97 |
| 22° | 1.22 | .94 | 1.00 | 1.06 | .94 | .93 | .85 | 1.04 |
| 23° | 1.28 | .97 | 1.11 | 1.14 | .97 | 1.00 | .89 | 1.11 |
| 24° | 1.34 | 1.01 | 1.22 | 1.22 | 1.02 | 1.07 | .93 | 1.18 |
| 25° | 1.40 | 1.05 | 1.33 | 1.30 | 1.08 | 1.14 | .97 | 1.25 |
| 26° | 1.46 | 1.09 | 1.44 | 1.38 | 1.16 | 1.21 | 1.01 | 1.32 |
| 27° | 1.52 | 1.13 | 1.55 | 1.46 | 1.24 | 1.28 | 1.05 | 1.39 |
| 28° | 1.58 | 1.17 | 1.66 | 1.54 | 1.32 | 1.35 | .... | 1.46 |
| 29° | 1.64 | 1.21 | 1.77 | 1.62 | 1.40 | 1.42 | .... | 1.53 |
| 30° | 1.70 | 1.25 | 1.88 | 1.70 | 1.48 | 1.49 | .... | 1.60 |
| 31° | 1.76 | .... | 1.99 | .... | 1.60 | 1.56 | .... | 1.67 |
| 32° | 1.84 | .... | 2.10 | .... | 1.72 | 1.63 | .... | 1.73 |
| 33° | 1.92 | .... | 2.21 | .... | 1.84 | 1.70 | .... | 1.79 |
| 34° | 2.00 | .... | 2.32 | .... | 1.96 | 1.77 | .... | 1.85 |
| 35° | 2.08 | .... | .... | .... | 2.08 | 1.84 | .... | 1.92 |
| 36° | 2.16 | .... | .... | .... | 2.16 | .... | .... | .... |
| 37° | 2.24 | .... | .... | .... | 2.24 | .... | .... | .... |
| 38° | 2.34 | .... | .... | .... | 2.34 | .... | .... | .... |
| 39° | 2.44 | .... | .... | .... | 2.44 | .... | .... | .... |
| 40° | 2.54 | .... | .... | .... | .... | .... | .... | .... |
| 41° | 2.64 | .... | .... | .... | .... | .... | .... | .... |
| 42° | 2.74 | .... | .... | .... | .... | .... | .... | .... |

*Column 2—Long Beach and Huntington Beach crudes, 14 to 32 degrees, inclusive; Richfield and Brea-Olinda, 14 to 30 degrees; Torrance and Inglewood, 14 to 28; Domingues, 24 to 42 degrees. Rosecrans crude ranges from 14 to 42 degrees, but only Union Oil Co. posts below 24 degrees.
Column 3—Whittier and La Habra crudes, 14 to 22 degrees; Montebello, 14 to 30 degrees.
Column 4—Kern River, Newhall and McKittrick, 14 to 19 degrees; Midway-Sunset and Elk Hills, 14 to 33 degrees; Lost Hills and Belridge, 14 to 34 degrees.
Column 6—Santa Fe Springs. Only Union Oil Co. posts below 24 degrees.
Column 9—Salt Lake, 14 to 19 degrees, inclusive; Santa Maria, 14 to 30 degrees; Ventura, 14 to 35 degrees. Posted only by Union Oil Co.

### NEBRASKA
**Standard Oil Co. (Nebraska)**

| | Gasoline — Tank wagon | Gasoline — Service station | Gasoline — Incids tax of | Kero. Tank wagon |
|---|---|---|---|---|
| Omaha | 21.25 | 23.25 | 2.0 | 16.0 |
| McCook | 22.75 | 24.75 | 2.0 | 17.5 |
| Norfolk | 21.75 | 23.75 | 2.0 | 16.5 |
| North Platte | 22.75 | 24.75 | 2.0 | 17.25 |
| Scottsbluff | 22.25 | 24.25 | 2.0 | 17.75 |

### ROCKY MOUNTAIN DISTRICT
**Continental Oil Co.**

| | Gasoline — Tank wagon | Gasoline — Service station | Gasoline — Incids tax of | Kero. Tank wagon |
|---|---|---|---|---|
| Denver, Colo. | 22.0 | 22.0 | 2.0 | 19.0 |
| Pueblo | 22.0 | 24.0 | 2.0 | 19.0 |
| Casper, Wyo. | 22.5 | 24.5 | 2.5 | 17.5 |
| Cheyenne | 23.5 | 25.5 | 2.5 | 19.0 |
| Butte, Mont. | 24.0 | 24.0 | 2.0 | 21.0 |
| Helena | 26.0 | 28.0 | 2.0 | 21.0 |
| Salt Lake, Utah | 26.0 | 28.0 | 3.5 | 19.0 |
| Boise, Idaho | 27.0 | 29.0 | 3.0 | 21.0 |
| Albuquerque, N. Mex. | 29.5 | 29.5 | 3.0 | 21.0 |

### TANKWAGON PRICE CHANGES

June 6—Standard Oil Co. of Indiana reduced tankwagon and service station prices of gasoline 1½ cents at Huron, S. D., and one-half cent at Sioux Falls, S. D.

## LANCE CREEK TO GET SALT CREEK PLANT

CASPER, Wyo., June 14.—The Ohio Oil Co. has taken over the absorption gasoline plant of the E. T. Williams Oil Co. in the Salt Creek Field and will dismantle and move it to the Lance Creek Field in Niobrara County. The plant was built on the E. T. Williams Oil Co.'s leases seven years ago.

The Ohio Oil Co. originally planned to install a compressor plant in the Lance Creek Field but when the gas pressure there showed signs of going off fast the compression project was abandoned.

### CRUDE OIL PRICES

(Continued from Page 169)

| | |
|---|---|
| sit Lines (New York) | $3.65 |
| Bradford District Oil in National Transit Lines (Pennsylvania) | 3.65 |
| Penna Grade Oil in National Transit Lines (Pennsylvania) | 3.55 |
| Penna Grade Oil in Southwest Pa. Line Lines (West Virginia) | 3.50 |
| Penna Grade Oil in Eureka Pipe Line Lines (Pennsylvania) | 3.55 |
| Penna Grade Oil in Buckeye Pipe Line Lines (Ohio) | 3.30 |
| Cabell Grade Oil in Eureka Pipe Line Lines (West Virginia) | 2.40 |
| Corning Grade Oil in Buckeye Pipe Line Lines (Ohio) | 2.55 |
| Somerset Medium Oil in Cumberland Pipe Line Lines (Kentucky) | 2.50 |
| Somerset Light Oil in Cumberland Pipe Lines (Kentucky) | 2.65 |
| Ragland Grade Oil in Cumberland Pipe Line Lines (Kentucky) | 1.25 |
| Gaines (Pennsylvania) | 3.10 |
| Keister (Pennsylvania) | 2.45 |

### MIDDLE WESTERN STATES
**Ohio Oil Co.**

| | |
|---|---|
| Lima | 2.48 |
| Wooster | 2.55 |
| Illinois | 2.37 |
| Indiana | 2.25 |
| Princeton | 2.37 |
| Plymouth | 1.90 |
| Waterloo | 1.35 |
| *Western Kentucky, 32.9° and below | 2.10 |
| 33° to 35.9° | 2.20 |
| 36° to 38.9° | 2.30 |
| 39° and above | 2.40 |
| †Cumberland, Barren and Monroe Counties | 2.65 |
| §Oil Springs (Canada) | 2.95 |
| §Petrolia (Canada) | 2.88 |

*Posted by Indian Refining Co.
†Posted by Paragon Development Co.
§Posted by Imperial Oil Co., Ltd.

### MEXICO

| | |
|---|---|
| *Tuxpam light (f.o.b. Mex. ports) | $1.35 |
| §Panuco heavy (f.o.b. Mex. Ports) | 1.15 |
| Tuxpam (New York) | 2.15 |
| Panuco (New York) | 1.80 |

*Plus 32.328c tax. §17.631c tax.

# 1916
# 1926

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# Gasoline Reaches Billion Gallons Basis

## Production and Consumption Reach That Figure During Same Month for the First Time in History of Industry

By Charles E. Bowles
*Petroleum Analyst, The Oil and Gas Journal*

From a refining point of view the outstanding fact of the accompanying set of graphs is that both the supply of and the demand for refinery gasoline are now on "a billion gallons a month" basis. This is the first time, in the history of the industry, that this has happened.

In July, and again in August, 1925, the demand for gasoline ran over a billion gallons. But the supply, during each of these months was less than a billion gallons.

Everyone is familiar with the tremendous expansion in the supply of and the demand for gasoline—but the following tabulation emphasizes the rate at which this expansion is going on:

| Date— | Supply Gallons | Demand Gallons |
|---|---|---|
| 1925 April | 881,733,000 | 908,055,000 |
| May | 938,991,000 | 942,946,000 |
| June | 960,303,000 | 982,009,000 |
| July | 983,753,000 | 1,068,179,000 |
| August | 985,869,000 | 1,055,943,000 |
| September | 913,742,000 | 940,308,000 |
| 1926 April | 1,006,690,000 | 1,016,301,000 |

During each of the above six months of 1925 the demand for gasoline was greater than the supply—and during the other six months of the year the supply was greater than the demand.

### Both Over 1,000,000,000 Gallons

In March 1926, supply was greater than demand. But in April, demand exceeded supply—and both supply and demand were over 1,000,000,000 gallons.

October is usually the "turning point" during which the supply of gasoline swings up over demand. And if this holds true in 1926 it will mean that in the six-month period (April, May, June, July, August and September) the supply of gasoline will be at least 6,000,000,000 gallons, and the demand will be at least 6,000,000,000 gallons.

The amazing thing is that, in 1926, the demand for gasoline hit "a billion gallons a month" in April—or 90 days earlier than in 1925, as shown in Graph 5 lines 4 and 5.

### Field Operations

From the oil producers' standpoint the outstanding thing, during April, was the unusual increase in the number of "rigs" and "drilling wells" in the Mid-Continent, as shown in Graph 1. Outside of the Mid-Continent both rigs and drilling wells were about the same as in April 1925.

| Mid-Continent— | Rigs | Drg. Wells |
|---|---|---|
| April, 1925 | 430 | 2,029 |
| April, 1926 | 667 | 2,603 |
| May, 1926 | 701 | 2,814 |

Not only were there more rigs and drilling wells in the Mid-Continent at the end of April, 1926, than at any time in 1925, but May, 1926, will show a further increase over the peak of 1925.

Dry holes (504) for May made up almost 35 per cent of the total completions in the Mid-Continent, at an average net loss of $21,300 per hole (see The Oil and Gas Journal, Feb. 18, 1926, page 34), the dry holes drilled in the Mid-Continent in May, 1926, cost the oil industry approximately $10,735,000.

Outside of the Mid-Continent there was an increase in both total wells and oil wells completed and in initial daily production as shown in Graph 3.

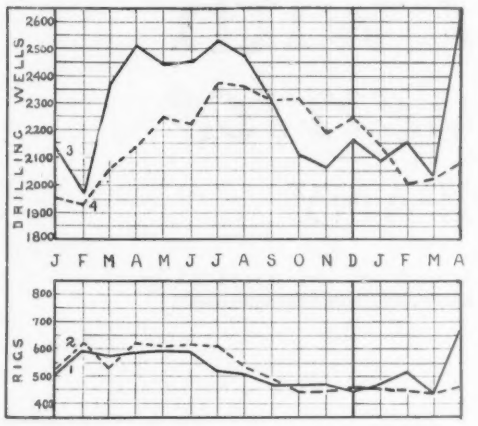
In comparison with a year ago (Graph 4) Arkansas production has declined more than any other state, April production being 6,500,000 barrels less than the peak in May 1925. Texas production was about 2,300,000 barrels less in April than the peak in May, 1925.

Thus these two states have lost about 8,500,000 barrels of monthly production, as compared with a year ago, thereby bringing the May, 1925 production for the United States—69,503,000 barrels—down to 60,259,000 bbls. in April, 1926.

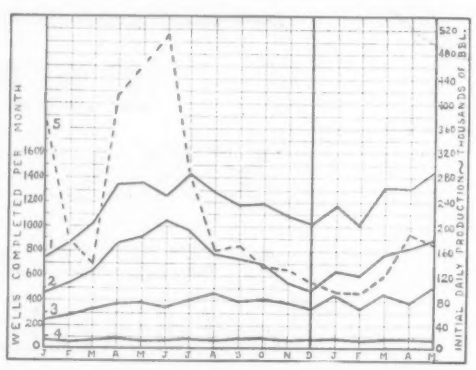
The strong market position of kerosene, during recent months, is clearly reflected by the close relation of Line 7 (stocks) with Line 6 (production) in Graph 5.

A wide margin between production and stocks during the greater part of 1925 and a narrow margin during recent months resulted in the strong upswing in the market price of kerosene. This is only another concrete example of the working of the law of supply and demand in the petroleum industry.

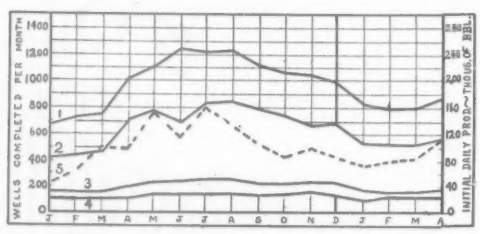
An almost identical cycle, and covering about the same period of time, culminated in the summer of 1919—again about the close of 1922—and again, but in smaller measure, in the latter part of 1923. Hence the present cycle is the fourth time in eight years that, for a number of months, kerosene stocks have swung



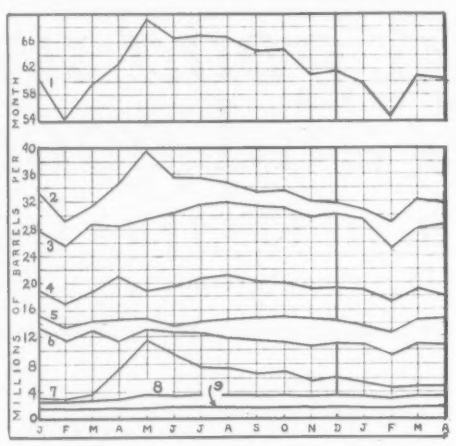

**Graph 1—New operations. Line 1, rigs in Mid-Continent. Line 2, rigs outside Mid-Continent. Line 3, drilling wells in Mid-Continent. Line 4, drilling wells outside Mid-Continent.**



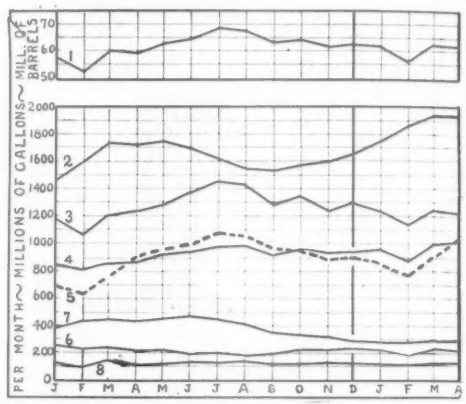

**Graph 2—Wells completed in Mid-Continent. Line 1, total wells completed. Line 2, oil wells. Line 3, dry holes. Line 4, gas wells. Line 5, initial daily production (read scale on right hand side.)**



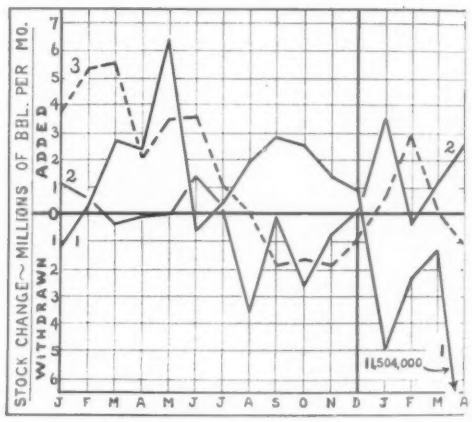

**Graph 3—Wells completed outside Mid-Continent. Line 1, total wells completed. Line 2, oil wells. Line 3, dry holes. Line 4, gas wells. Line 5, initial daily production (read scale on right hand side.)**



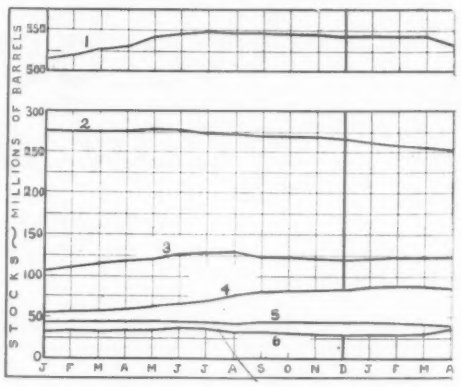

**Graph 4—Production of crude oil. Line 1, total for United States. Line 2, Mid-Continent. Line 3, outside Mid-Continent. Line 4, California. Line 5, Oklahoma. Line 6, Texas. Line 7, Arkansas. Line 8, Kansas. Line 9, Louisiana.**




**Graph 5—Refinery operations. Line 1, crude oil (domestic and foreign) run to stills. Line 2, gasoline stocks. Line 3, fuel oil production, entire country. Line 4, gasoline supply (production plus imports). Line 5, gasoline demand (domestic demand plus exports). Line 6, kerosene production. Line 7, kerosene demand. Line 8, lubricating oil production.**




**Graph 6—Additions to and withdrawals from storage. Line 1, pipeline and tank farm stocks for entire country and including fuel oil in California. Line 2, crude oil at refineries east of California. Line 3, refined products at refineries for entire country but not including fuel oil in storage in California. Please note, this graph shows "changes in amount" of different items in storage, from month to month. Changes are reckoned from the zero (0) line each month.**




**Graph 7—Petroleum stocks. Line 1, total stocks for entire United States, of crude oil, finished and unfinished products. Line 2, pipeline and tank farm stocks east of California. Line 3, refined products at all refineries, but not including fuel oil in storage in California. Line 4, heavy crude oil and fuel oil in storage in California. Line 5, light crude oil in storage in California. Line 6, crude oil at refineries east of California.**

high above current production—and were succeeded by a short period during which stocks and production traveled very close together.

The present narrow margin between production and stocks is lasting longer than any of the preceding periods—but indications are that the present "cycle" is about at its end, and that the stock line will again swing slowly upwards.

**Decrease in Stocks**

Entirely aside from the destruction by fire of 8,215,000 bbls. of crude in April in California Line 1 of Graph 6 would have fallen below the zero (0) line by about 2,000,000 bbls. As it was, however, there was a total decrease in pipeline and tank farm stocks for the entire country of 11,504,000 bbls. (Line 1)—an increase of 2,530,000 bbls. in crude oil at refineries (Line 2)—a decrease of 46,000 bbls. in foreign oil not at refineries (not shown on graph)—and a decrease of 1,118,625 bbls. in refined and partly refined products at refineries (Line 3). The net result of these four movements was that, at the end of April, total storage of crude oil and its products was 10,138,625 bbls. less than at the end of March.

The figures for May will undoubtedly show further drafts on crude oil in pipeline and tank farm storage as well as on refined products at refineries. In other words, Graphs 6 and 7 will continue to reflect favorable conditions.

## EXPORT BUYING HELPS STRENGTHEN GASOLINE

(Continued from Page 36)

buying materializes, there still will be plenty of gasoline available.

This latter opinion is borne out in the still comparative easiness of gasolines, and only slight advance in prices. Spot domestic demand continued slow Monday and Tuesday as in the past few weeks and only a few additional export purchases were placed.

The buying, however, did cause many refiners to withdraw quotations on gasoline for future delivery. During the previous week when markets were unusually quiet and weak and the outlook for June was not bright, there was a decided effort on the part of some refiners to unload and make some exceptionally low offers for gasoline to be delivered over the next 30 days. These offers Tuesday were few and none below present market quotations.

Several important purchases were made by jobbers during the week before the export buying which will enable these jobbers to remain out of the market at least 30 days. These were made so quietly and at such exceptionally favorable prices to the jobbers that there was no noticeable effect on the market. These purchases necessarily will lessen the amount of gasoline which might be bought during the coming month, and may have an important bearing on the situation, especially if other jobbers continue their slow policy of buying.

**Natural Gasolines**

Many market students expected the buying of higher gravity gasoline to have an immediately favorable effect on natural gasoline demand but until Tuesday nothing of this nature had developed although manufacturers were inclined to hold prices in anticipation of demand. Others point out that there may be sufficient gasoline in storage to fill the export demand, and, if so, it will not be necessary for refiners to buy more natural gasoline to produce the material.

**Gasoline and Naphtha**

Although the purchases included only the 64-66 375 and the 60-62 400 grades, all gasolines were stronger in tone and some quotations were advanced slightly. However, practically all grades were readily obtainable at market quotations of a week ago. The 64-66 375 gasoline continued to be offered at 12¼ to 12½ cents and the 60 material at 12 cents.

The U. S. Motor (58-60 437) was offered from 11½ to 11¾ cents Tuesday, the same as a week ago, but apparently there was very little available under this price as there was the middle of the past week. Several important purchases as low as 11¼ cents were reported before the buying activity.

Although not large, the biggest domestic demand was in the 450 endpoint products, several refiners reporting increases in these grades. The 56 58 450 gasoline still was quoted at 11¼ to 11⅜ cents and the 58-60 450 product at 11½ cents, with some shading of this.

**Natural Gasolines**

Natural gasolines until late Tuesday had not reflected any of the activity in straightrun gasolines and all products were substantially lower in price. The week also was marked by a narrowing of the price margin between the various grades, all ranging between 9 and 9¼ cents. One seller is reported to have offered to sell a Grade A gasoline on any inquiry. The most bearish development in naturals was the action of North Texas sellers in dumping large quantities of gasoline on the market during the week.

**Kerosene and Distillates**

Kerosenes suffered another drop of a cent, making a total of 2 cents in two weeks. Inquiries for kerosene during the week were negligible and with a continuation of this situation additional rapid declines are inevitable. The 41 43 water white product was offered in any quantity at 8 cents and a few offers lower than this were reported.

Distillates were featureless, but prices were fairly steady. A few concessions were reported. Considerable speculation as to distillates next season is being heard at this time, but so far refiners are slow to make any contracts despite bearish talk by jobbers. The 38-40 straw colored product was quoted at 4½ cents Tuesday, but some material was available at 4⅜ cents.

**Fuel Oil and Gas Oil**

Developments in fuel oil were anything but favorable as all grades were off from 2½ to 5 cents a barrel, including the lighter gravities. The 24-26 fuel was readily available at $1.25 and some offers were reported at $1.20. The 26-30 fuel was quoted as low as $1.30 and the 28-30 at $1.35.

Gas oil, however, was firm. This was due largely to extensive purchases by the Atlantic Refining Co. and other buyers. The Atlantic purchases were principally in North Texas, but as that market apparently was fairly well cleaned, buyers were forced to Oklahoma refiners to fill their needs.

A steadily increasing movement was reported by lubricant manufacturers in most grades and practically all prices were firm.

## GEOPHYSICAL METHODS FOR FINDING OIL

(Continued from Page 38)

further tests might show that this cause of irregularity was so sharply localized as probably to be caused by a buried salt dome.

"Summarizing: Ignoring the cost element, the torsion balance can presumably be made to give significant results in flat countries. In a hilly region or one much dissected by ravines and gulleys, it may not give good results.

"The seismograph is less affected by the irregularities of the surface of the ground and works best in a region such as the Gulf Coast where the sedimentary rocks are soft sands and clays and the salt masses and associated cap rock of the salt domes are practically the only hard rocks present, as each hard and soft bed gives a different set of waves on a seismograph record. Where there are many alternating hard and soft layers, as is the case in many oil fields in the United States, the seismograph record may become so complex as to be impossible of interpretation.

"Doubtless with accumulating experience more and more difficult probems can be satisfactorily solved, but it remains to be demonstrated that earth tremors, sound waves, or earth temperatures can be generally and successfully used for the location of hidden oil pools in regions such as Oklahoma or Kansas."

## NATURAL GASOLINE IS CALIFORNIA FEATURE

LOS ANGELES, Calif., June 11.—Natural gasoline continues to hold the leading position in the California market. Due to the falling off in shipments of natural gasoline from the Mid-Continent, the local market has been strengthening during the past two or three weeks. Spot sales are being made as high as 1¼ cents under the service station price of motor gasoline (without tax), for material of about 77 to 78 degrees A. P. I. gravity and 375 degrees Fahrenheit endpoint. Lower gravity and higher endpoint natural gasoline is commanding from 1½ to 1¾ cents under, on spot sales. The contract price at present ranges from 2 to 3 cents under, with most sales being made at about 1½ cents under.

While the natural gasoline market has gained some of the strength that was lost due to the bringing in of the Mid-Continent product, natural gasoline manufacturers do not look forward to any material increase in price unless the price of motor gasoline is advanced. It is reported that since the first of the year, approximately 600 cars of natural gasoline were received by California refiners from the Mid-Continent. While this trade has almost completely stopped for the present it is argued that if natural gasoline prices increase to any extent, the Mid-Continent product will again start to come to California.

It is also reported that the recent carload shipments of natural gasoline from the Mid-Continent to the Coast have awakened the railroads to the possibility of increasing their revenues by encouraging such movements. Accordingly, they are taking steps towards having the rate on this commodity reduced sufficiently to encourage such shipments. If this transpires, it will, of course, be a serious factor in the California market.

The purchase of the Pacific Gasoline Co. by the Standard Oil Co. of California illustrates how anxious the large companies are to insure themselves of an adequate supply of natural gasoline.

These purchases alone demonstrate the very strong demand for natural gasoline existing at the present time, especially among the larger companies. At the same time the taking over of these large independent gasoline companies will tend to reduce competition among the buyers of natural gasoline and consequently will probably have a weakening effect on natural gasoline prices. On the other hand, there is more and more natural gasoline used and production of this commodity is decreasing, so unless the Mid-Continent material is able to come in and compete on favorable terms, the market is expected at least to hold its present strength for some time.

Domestic demand for motor gasoline is showing improvement in spite of cool and foggy weather. Shipments to the Atlantic Seaboard and foreign ports are holding up well. Lubricating oil sales are showing some improvement, moving along with motor gasoline.

## BOOM TOWN IN HEART OF TEXAS PANHANDLE BURNING

Borger, Texas, an oil field town, which was experiencing a serious fire on Tuesday of this week, had a population of 10,000 and is less than 90 days old. It was regarded as the coming center of the supply houses, and many tool companies and machine shops had already established branches there. It has very limited fire protection facilities although within a few miles of the Canadian River.

## NORTH CENTRAL TEXAS

(Continued from Page 133)

Fred Holmberg's No. 1 A. C. Friberg, 150 feet south and east NW cor. of south 40 acres of east 80 acres, Friberg's 160 acres, in Henry Hastie Survey A-98. Magnolia Petroleum Co.'s No. 129 Reiily, 500 feet north and 1,200 feet west of NE cor. J. B. Johnson Survey A-169, and located in L. C. Denison Survey A-55, drilling at 700 feet; No. 130 H. Reilly, 2,125 feet north and 500 feet east of SE cor. J. Waldschmidt Survey A-570, and located in L. C. Denison Survey, cellar. Magnolia's No. 71 S. E. Honaker, 1,450 feet north and 850 feet west SE cor. W half, Section 2, S. P. Survey, drilling at 220 feet; No. 55 Rio Bravo Oil Co., 200 feet north of CSL W half NE, Section 31, Block 5, H. & T. C. Survey, drilling at 250 feet, rotary. Petroleum Production Co.'s No. 4 L. P. Douglas, 300 feet north and 1,900 feet west of SE cor. L. P. Douglas tract in Section 11, H. T. & B. Survey A-136, drilling at 800 feet. Rubsam, Hunter, Atkins & Jenkins' No. 1 W. D. McClure, 892 feet north and 750 feet west of SE cor. McClure 227 acres in Section 5, G. C. & S. F. Survey A-363, drilling at 300 feet, rotary.

### Wilbarger County

Magnolia Petroleum Co.'s No. 50 W. R. Piper, 1,150 feet south and 750 feet east of NW cor. Section 18, Block 13, H. & T. C. Survey. Milham Corp.'s No. 11 W. T. Waggoner "H", 155 feet south and 489 feet west of NE cor. their 34-acre "H" lease in Section 42, Block 4, H. & T. C. Survey, rigging up rotary; No. 13 W. T. Waggoner "L", 155 feet north and 750 feet west of most easterly SE cor. of their 34.6-acre "L" lease, same section, a rig. Phillips Petroleum Co.'s No. 1 W. T. Waggoner "C", 220 feet north and west of SE cor. NW SE, Section 47, Block 2, H. & T. C. Survey, a location; No. 6 Waggoner "H", 220 feet south and 660 feet west of NE cor. SE SW, Section 46, Block 4, a rig; No. 2 Waggoner "Y", 220 feet south and east of NW cor. SE NW, Section 43, Block 4, a rig; No. 8 Waggoner "QQ", 489 feet north and 532 feet east of SW cor. of their "QQ" lease, Section 47, Block 4, a location; No. 2 Waggoner "WW", 155 feet south and east of NW cor. SE, 10 acres of north 164.4 acres of Section 42, Block 4, a location.

Bridwell & Heydrick's No. 12 S. A. Dill, 230 feet north and 150 feet east of SW cor. Section 84, Block 14, H. & T. C. Survey, drilling at 1,500 feet. Phillips Petroleum Co.'s No. 1 W. T. Waggoner "N", 220 feet south and west NE cor. SW NW, Section 43, Block 4, a rig; No. 2 "N", 220 feet south and 659 feet west of NE cor. SW NW, a rig; No. 3 Waggoner "HH", 182 feet north and 220 feet east of SW cor. of their 43.3-acre "HH" lease, Section 43, Block 4, a rig; No. 6 Waggoner "NN", 220 feet north and east of SW cor. their "NN" lease, Section 42, Block 4, a rig; No. 7, 220 feet north and 2,086 feet east of SW cor. same lease; No. 7 Waggoner "QQ", 828 feet north and 200 feet east SW cor. of their "QQ" lease, Section 47, Block 4, H. & T. C. Survey, rigging up rotary. Waggoner Refining Co.'s No. 3 Waggoner "A", 750 feet north and 2,840 feet east of SW cor. Section 47, Block 4, H. & T. C. Survey, a location.

### Archer County

L. P. Hammond's No. 1 Dr. A. B. Edwards, 150 feet north and west SE cor. Lot 5, Lula Platt Hunt subdivision, George Bruner Survey A-6, a location. M. L. Lewis and others' No. 2 A. D. Thompson "B", 150 feet north and 450 feet west SE cor. E half, Lot 3, Section 21, A. T. N. C. L. Survey, a location. Magnolia Petroleum Co.'s No. 8 May Rutty "A", 150 feet north and 850 feet west SE cor. north 20 acres, E half May Rutty 160 acres in J. T. O'Reilly Survey A-360, a location. McCarty Oil Co.'s No. 1 School land, 150 feet north and east SW cor. Section 2, H. & T. C. Survey A-1,278, and located in 5-acre school lot, a location; same company's No. 28 L. F. Wilson "B", 1,950 feet north and 150 feet east SW cor. W half, north 160 acres E. Hall Survey A-682, drilling at 100 feet; No. 29 L. F. Wilson "B", 720 feet south and 512 feet west of NE cor. W half, same 160 acres, a location. Texhoma Oil & Refining Co.'s No. 12 W. B. Hamilton and others, 556 feet north and 750 feet west of SE cor. Section 22, League 4, Denton County school land, A-114, a location. Wanderer Oil Co. and Humble Oil & Refining Co.'s No. 1 L. F. Wilson "A", 150 feet south and west NE cor. Lot 821, Geraldine subdivision, Section 82, A. T. N. C. L. Survey, a location.

Atlantic Oil Producing Co.'s No. 7 Rachuig "A", 150 feet north and 250 feet west of SE cor., north 26 acres, NW, Section 4, B. B. B. & C. Survey A-778, a location. Golding & Cochran's No. 1 J. A. Bell, 150 feet south and west of NE cor., south 30 acres, east 77 acres, Section 15, Block 5, Clark & Plumb subdivision, rigging up rotary.

Harris & Gose's No. 1 I. M. Inmon and others, 275 feet north of CSL, west 84 acres of north 168 acres, Sarah McKimbs Survey A-493. Kell & Kruger's No. 2 R. O. Prideaux, 450 feet north and 150 feet west of SE cor. north 113 acres, J. I. Hand Survey A-181, drilling at 400 feet. Magnolia Petroleum Co.'s No. 8 W. T. Coffield, 650 feet south and 150 feet east, NW cor. A. P. Richardson Survey A-356, a location. Olney Drilling Co.'s No. 1 T. L. Blewitt, 150 feet south and west NE cor. west 30 acres of south 120 acres, W half, Section 2, J. Poitevent Survey A-1,178, drilling at 125 feet. Pandem Oil Corp.'s No. 2 W. H. Thomas, 150 feet south and west NE cor. south 50 acres, Lot 5, North subdivision, N. Thomas Survey, a location. The Texas Company's No. 13 B. R. Jeske, 635 feet north and 737 feet west of SE cor. Section 6, Thomas McCoy Survey A-269, a location. Texhoma Oil & Refining Co.'s No. 8 Abercrombie & Taylor, 1,963 feet north and 450 feet east, SW cor. west 70 acres of SW 160 acres, Section 2, S. P. R. R. Survey A-1,281, drilling at 275 feet; No. 4 L. J. Kunkel, 803 feet north and 150 feet west of SE cor. Block 2, Thomas McCoy Survey, a location.

### Clay County

J. J. Jenkins' No. 1 T. E. Teat, 150 feet north and east SW cor. north 120 acres of T. E. Teat 180 acres, Section 26, Specht & McCutcheon subdivision, location.

### Montague County

Benton Woods and others' No. 9 R. Hinds, 150 feet north and east SW cor. of 32-acre lease in J. J. Wall Survey, rigging rotary. F. H. E. Oil Co.'s No. 3 Rober Hinds, 547 feet south and 150 feet west of NE cor. north 20 acres west half J. J. Wall Survey; No. 1-A, 199, also rigging up rotary; No. 1 N. J. Howard and others, 1,850 feet north and 2,648 feet west of SE cor. John Chambliss Survey, A-123, location; The Texas Company's No. 9 I. A. Gist "A," 1,143 feet south and 150 feet west NW cor. J. J. Wall Survey, A-1,199, and located in Gist 484-acre tract in William Donoho Survey, A-178, location. Humble Oil & Refining Co.'s No. 7 Hinds, 1,096 feet south and 150 feet west NE cor. its 40-acre lease, J. J. Wall Survey. The Texas Company's No. 1 N. J. Howard and others' "B," 3,750 feet south and 2,150 feet west NE cor. John Chambliss Survey, A-123, being 150 feet north and east of SW cor. of their 80-acre lease; No. 8 J. B. Oldham and others, 523 feet north and 1,113 feet west of SE cor. of their lease, John Chambliss Survey, both locations.

### Cooke County

Pat Hudson and others' No. 1 J. P. Kidd, 2,639 feet south and 1,320 feet west of NE cor. Section 13, S. P. Survey, rigging up rotary.

### Wise County

R. W. Little Co.'s No. 1 J. W. Houston, 350 feet north and east SW cor. S half SE, Section 5, Falls County School Land, rigging up rotary.

### Jack County

Baytex Oil Co.'s No. 1 J. M. Patton, 150 feet south and east NW cor. west 40 acres of J. M. Patton 125-acre tract in R. Parker Survey, A-461, location; No. 2 Mrs. M. D. Snedeker, 450 feet north and 150 feet east SW cor. east 42 acres of south 126 acres of north 252 acres of 415-acre tract in J. Robbins Survey, A-490, drilling at 100 feet; No. 3 Mrs. M. D. Snedeker, 150 feet north and 450 feet east SW cor. east 42 acres of south 126 acres of north 252 acres of 415-acre tract, same survey, spudded. Crabb, McNeil and others' No. 1 J. D. Gillespie, 250 feet north and west of SE cor. J. M. Wilhelm Survey, A-1,344, location.

Davis and others' No. 1 J. D. Gillespie, midway east and west lines and 150 feet north of south line of north 100 acres of Gillespie 312-acre tract, Mrs. W. Berryman Survey, A-40, location. Godley Oil Co.'s No. 1 John Allen, 150 feet north and 1,470 feet west SE cor. S half S. P. Survey No. 2, A-2,140, location. Hastain & Purman's No. 1 M. N. Brown, 3,301 feet south and 3,850 feet west NE cor. William McDonald Survey, A-378. Scott and others' No. 1 J. W. Carter, 150 feet north and west SE cor. N half Section 3,305, T. E. & L. Survey. Staley & Wynne's No. 1 Mrs. M. D. Snedeker, 150 feet north and west SE cor. east 42 acres of west 84 acres of south 126 acres of north 252 acres of Snedeker 415-acre tract, J. Robbins Survey, A-490. Wallace & Nichols' No. 1 Mrs. M. M. Plemons, 800 feet south and 2,640 feet west of most northerly NE cor. E. Smith Survey, A-524, drilling at 90 feet. Wellman and others' No. 1 J. M. Patton, 150 feet north and east SW cor. north 40 acres of east 85 acres of Patton 125 acres in R. Parker Survey, A-461.

### Young County

Barkley and others' No. 1 W. B. Bailey, 150 feet south and east NW cor. SW 20 acres (square) of west 160 acres, Section 165, T. E. & L., rigging up rotary; No. 1 J. W. Dean, 150 feet south and east NW cor. Section 19, Young County school land, A-1,284, location; No. 1 G. Stewart, 122 feet south and 3,970 feet east NW cor. D. Dawson Survey, A-76, drilling at 300 feet. Biljobul Oil Co.'s No. 1 F. M. Gilmore, 150 feet north and west SE cor. Section 14, Young County school land, A-1,284, rigging up spudder; No. 1 M. A. Stewart, 150 feet north and east, SW cor. NW, Section 27, Young County school land, location. Bridwell & Mayfield's No. 8 H. B. Street, 917 feet south and 1,267 feet west NE cor. Section 2,444, T. E. & L. Survey, drilling at 450 feet; No. 2 Allen Williams, 650 feet north and 690 feet east SW cor. Section 26, Young County school land, location; No. 3 Allen Williams, 150 feet north and 450 feet west SE cor. same section.

The Camp Oil & Gas Co.'s No. 1 Mrs. M. W. Sanders, 150 feet north and west SE cor. W half Section 1,936, T. E. & L. Survey, location. R. Campbell's No. 1 R. Campbell, 150 feet south and west NE cor. SW, Section 1,376, T. E. & L. Survey, location. R. I. Carter's No. 12 S. M. J. Benson, 450 feet north and 150 west SE cor. of 33-acre lease, Section 1,450, T. E. & L., location. Cosden-Consolidated Oil Co.'s No. 5 S. M. J. Benson, 750 feet south and 300 feet west NE cor. Section 1,391, T. E. & L; No. 6, 1350 feet south and 900 feet west NE cor.; No. 7, 1.050 feet south and 300 feet west NE cor. same section, all locations. No. 1 G. P. Stewart, 150 feet south and 1,016 feet west NE cor. J. A. Zinn Survey. A-1,661, rigging up rotary. Hamilton & Martin's No. 1 H. L. Whitehead, 150 south and west NE cor. east 22.5 acres of west 62.5 acres of south 120 acres, Section 166, T. E. & L. Survey, rig. Magnolia Petroleum Co.'s No. 3. I. C. Little and others, 750 feet south and 150 feet west NE cor. east 100 acres of Little 159-acre tract in I. Holman Survey, A-130, location. Nash & Windfohr's No. 1 J. P. Logan, 150 feet south and east NW cor. NE, Section 24, Young County school lands, A-1,284, moving in spudder. Roberts Oil Corp.'s No. 1 F. M. Gilmore, 160 feet north and east SW cor. Section 14, Young County school lands, rigging up spudder. Ryan and others' No. 1 R. J. Calvin, 1,170 feet south and 150 feet west of NE cor. R. J. Calvin 200-acre tract in A. Rohus Survey, A-240, location. Reed & Anderson's No. 1 D. Bird, 150 feet north and 1,050 feet east SW cor. Section 202, T. E. & L., rigging up rotary. Simms Oil Co.'s No. 1 W. B. Bryan, 150 feet north and west, SE cor. east 30 acres of west 50 acres of south 100 acres of W. B. Bryan 160 acres in Section 1,367, T. E. & L. Survey, location.

Barkley and others' No. 2 Earl Rogers, 1,500 feet north and 1,650 feet west SE cor. Section 166, T. E. & L. Survey, drilling at 300 feet; No. 3 Earl Rogers, 1,500 feet north and 2,100 feet west SE cor. same section, rigging up rotary. Bridwell & Heydrick's No. 1 H. L. Whitehead, 150 feet south and east NW cor. east 35 acres of south 120 acres, same section, dry and abandoned at 915 feet. Cosden-Consolidated Oil Co.'s No. 4 S. M. J. Benson, 1,050 feet south and 900 feet west NE cor. Section 1,391, T. E. & L., setting 6-inch at 861 feet. Chenault & Lea's No. 2 R. H. Rachiug, 450 feet south and 150 feet east NW cor. east 20 acres of north 70 acres of east 94 acres of south 134 acres of NW Section 4, B. B. B. & C. Survey, A-1,838, drilling at 800 feet. Jeffers & Jeffers' No. 1 W. D. Hall, 150 feet north and 750 feet east SW cor. south 40 acres of east 186 acres, Section 167, T. E. & L. Maer & Staniforth's No. 1 Prideaux Brothers, 150 feet south and west NE cor. south 100 acres of north 180 acres of east 260 acres, Section 1, C. T. R. R. Survey, A-68, spudded. Pandem Oil Corp.'s No. 1 Whitehead, 160 feet south and west NE cor. west 40 acres of south 120 acres, Section 166, T. E. & L. Survey, location. Pois & Weaver's No. 1 H. L. Whitehead, 150 feet south and east NW cor. west 22.5 acres of east 57.5 acres of south 120 acres, Section 166, T. E. & L. Survey, drilling at 360 feet. Sun Oil Co.'s No. 2 Otto Deitrich, 450 feet south and 150 feet east NW cor. south 114 acres of Otto Deitrich 145 acres in NE, Section 4, B. B. B. & C. Survey, A-1,700, drilling at 860 feet. Tarkington and others' No. 2 Prideaux Brothers, 150 feet south and 475 feet west NE cor. William Stoneham Survey, A-250, drilling at 400 feet.

### Fisher County

Ideal Oil Co.'s No. 1 W. F. Martin, 150 feet south and east NW cor., Section 113, Block 1, H. & T. C. Survey, rig.

### Shackelford County

Haile & Knight's No. 1 W. D. Reynolds, 1,980 feet north and east SW cor. Section 37, Block 12, T. P. R. R. Survey, but being in the J. L. Osborn Survey, location. Hope Petroleum Co.'s No. 2 Davis, 465 feet north and 165 feet west SE cor. E half NE, Section 13, Block 12, T. & P. Survey, machine; No. 3 Davis, 780 feet north and 165 feet west SE cor. E half NE, same section, location; No. 4 Davis, 1,095 feet north and 165 feet west SE cor. E half NE, same section, location; No. 8 W. D. Reynolds, 150 feet north and east SW cor. NW, Section 24, Block 11, T. & P., cellar; No. 9, 465 feet north and 150 feet east SW cor. NW; No. 10, 780 feet north and 150 feet east SW cor. NW; No. 11, 1,095 feet north and 150 feet east SW cor. NW, same section, locations. Edwin N. Jones' No. 1 W. T. Powers, 150 feet north and west SE cor. NE, Section 35, Block 12, T. & P. Survey. McCurdy and others' No. 1 Mrs. M. E. Ledbetter, 1,800 feet southwest of NE line and 150 feet northwest of SE line, Section 658, T. E. & L. Survey.

Roeser & Pendleton and Marland Oil Co.'s No. 10 Cook, A-84, 150 feet north and 704 feet west SE cor. SW SE, Section 84, Block 10, E. T. R. R. Survey, location; No. 15 Cook, A-85, 165 feet south and 704 feet west NE cor NW NE, Section 85, Block 10, rigging up machine. Roeser & Pendleton's No. 2 Cook B-84, 150 feet south and east NW cor. SE SE, Section 85, Block 10. rig on ground. C. E. Waterbury and others' No. 1 William Poindexter, 660 feet north and west SE cor. SE NE, Section 60, Block 12, T. & P. Survey, location.

Marland Oil Co.'s No. 1 L. G. Davis, 660 feet south and 1,320 feet east NW cor. N half NW, Section 39, Block 12. T. & P. Survey. Southern Petroleum Exploration Co.'s No. 1 J. F. Dyer, 660 feet north and west SE cor. SE SE,

Section 84, Block 12, T. & P. Survey; No. 2, 660 feet north and west SE cor. SW SE, Section 74, Block 12; No. 3, 660 feet north and east, SW cor. NW SW, Section 85, Block 12.

**Throckmorton County**

Humble Oil & Refining Co.'s No. 1 Mrs. M. E. Ledbetter, 200 feet northeast of SW line and 200 feet northwest of SE line of northeast 160 acres of southeast 320 acres, A. J. Kemp Survey, A-1,369, drilling at 510 feet. Same company's No. 1 Lee Tuton, 200 feet northwest of SE line and 200 feet southwest of NE line of northwest 160 acres of southwest 320 acres, same survey, drilling at 700 feet.

**Jones County**

Phillips Petroleum Co.'s No. 1 J. Winter, 330 feet north and east SW cor. NW, Section 19, Block 19, T. & P. Survey, location.

**Stephens County**

Mid-Kansas Oil & Gas Co.'s No. 19 J. W. Hill, 150 feet south of center Brazos River and 220 feet SE of SE line S. H. Hill 7.5 acres and located in J. H. Hill 147-acre tract in J. C. Talley Survey, A-2,058. Humble Oil & Refining Co.'s No. 7 J. W. Smith, 851 feet south and 2,906 feet east of NW cor. Section 77, Block 4, T. & P., drilling at 1,225 feet; No. 1 J. D. Stanford, 660 feet south and 330 feet west NE cor. SW, Section 20, Block 6, T. & P., building rig. Strawn Petroleum Co.'s No. 24 J. N. Stuart, 620 feet south and west NE cor. Section 70, Block 4, T. & P., drilling at 2,000 feet. Texas Fidelity Oil Corp.'s No. 2 J. M. Parks, 900 feet north and 300 feet west SE cor. NW, Section 42, Block 6, T. & P., location.

Law and others' No. 1 D. G. Vick, 500 feet south and 933 feet east NW cor. W half Section 1,034, T. E. & L. Survey, drilling at 850 feet.

**Palo Pinto County**

Burton McKee Oil Corp.'s No. 1 Strawn Coal Co., 3,000 feet south and 3,200 feet east of NW cor. of 380-acre tract in Isaac Ryan Survey, A-318, fishing at 875 feet. Goodwin & White's No. 1 J. M. Guest, 930 feet south and 300 feet east NW cor. of J. M. Guest 106.5 acres in Section 73, League 3, Burleson County school land. H. C. Heath and others' No. 2 A. P. Wilbur, 4,262 feet south and 3,612 feet west of NE cor. James Latham, Jr., Survey, A-279, being 850 feet north and 1,500 feet east of SW cor. A. P. Wilbur 600 acres, spudding.

Moore & Snebold's No. 1 J. H. Robinson, 2,130 feet south and 1,750 feet east NW cor. Section 53, Block 3, T. & P. Survey, shut down at 990 feet.

**Eastland County**

Corzelius Brothers' No. 1 W. I. Allison, 150 feet north and west SE cor. NW, Section 2, Block 2, H. & T. C. Survey. Greene Production Co.'s No. 1 W. L. Richmond, 875 feet north and west SE cor. W. L. Richmond 132-acre tract in William DeMoss Survey, spudded. Magnolia Petroleum Co.'s No. 11 P. O. Harris, 25 feet north of T. P. R. R. and 150 feet west of E line of P. O. Harris 120 acres, Heirs of M. Finch Survey. N. A. Moore and others' No. 1 E. S. Pritchard, 150 feet north and west SE cor. N half E half NE, Section 10, Block 2, H. & T. C. Robert Oil Corp.'s No. 1 W. L. Knight, 160 feet north and west SE cor. Section 65, League 3 and 4, McLennan County school land, drilling at 850 feet. Barkley & Crotty's No. 1 G. W. Hill, 400 feet south and west NE cor. Lot 4. J. F. Sapp Survey, moving in tools. Shasta Oil Co.'s No. 1 M. J. Allen, 300 feet north and west SE cor. E half SE, Section 115, Block 3, H. & T. C., timbers.

Eastland Oil Co.'s No. 1 P. G. Wright, 150 feet north and 652 feet west SE cor. P. G. Wright 40-acre tract, Lot 54, League 3 and 4, McLennan County school land, rig, moving in tools. Fort Ring Oil & Gas Co.'s No. 1 J. D. Tucker, C Lot 2 in W third of T. A. Howell Survey, drilling at 2,850 feet. Humble Oil & Refining Co.'s No. 1 S. H. Parsons, 150 feet south and east NW cor. of south 50.3 acres of east 100.6 acres Lot 53, Leagues 3 and 4, McLennan County school land, rigging up. Parsons and others' No. 4 J. S. Motes, CE half of south 120 acres, Lot 9, McLennan County school land No. 2, drilling at 800 feet. Prairie Oil & Gas Co.'s No. 1 S. H. Parsons, 150 feet north and east SW cor. of north 50 acres of east 100 acres, Lot 53, Leagues 3 and 4, McLennan County school land, rigging up. J. E. Smith and others' No. 1 L. C. Downtain, 900 feet north and 1,200 feet east of NW cor. Section 14, Block 2, H. & T. C. Survey, and located in Section 2, Block 6, E. T. R. R. Survey, rig building. W. B. Smith and others' No. 1 J. R. Wright, 150 feet north and east SW cor. S half Lot 52, Leagues 3 and 4, McLennan County school land, rig on ground. Hamon & Conley's No. 1 T. F. Murrell, 150 feet south and west NE cor. of north 20 acres of W half NW, Section 30, Block 2, H. & T. C. Survey.

**Callahan County**

French & Lewis' No. 1 W. L. Jones, 150 feet north and west SE cor. W. L. Jones tract in U. Bass Survey No. 9, drilling at 900 feet. Gibson & Johnson's No. 1 E. L. Finley, 200 feet south and 660 feet west of NE cor. NE SE, Section 68, Bayland Orphan Asylum lands, location; No. 1 R. D. Williams, 660 feet north and east SW cor. SW NE, Section 62, B. O. A. lands, location. Holmes and others' No. 1 F. S. Bell, 450 feet north and east SW cor. Section 77, B. O. A. lands, drilling at 500 feet.

J. K. Hughes Development Co.'s No. 1 Powell & Leggett, 660 feet north and 1,980 feet east SW cor. Section 41, J. Drake Survey No. 780, location. Prairie Oil & Gas Co.'s No. 1 J. C. Baum, 150 feet north and 190 feet west of SE cor. east 25 acres of J. C. Baum 101-acre tract, Section 90, Comal County school lands; No. 1 B. B. Bond, 150 feet south and 480 feet east NW cor. west 20 acres of B. B. Bond 37.5 acres, W. G. Anderson Survey; No. 2 B. B., 150 feet south and east NW cor. west 20 acres same tract; No. 1 R. Cunningham, 150 feet south and 210 feet west NE cor. Section 73, Comal County school lands, machine in place; No. 2, 150 feet west and 450 feet south NE cor. same section, machine; No. 8 J. B. McDonough, 150 feet north and 510 feet east SW cor. McDonough tract, J. Knight Survey, drilling at 1,200 feet.

**Ector County**

Llano Oil Co. and others' No. 1 E. P. Cowden, CWL Section 5, Block B-14, public school lands, location.

**Mitchell County**

California company's No. 2 C. M. Adams Lease 3, 2,310 feet south and 2,369 feet west NE cor. Section 11, Block 28, T. P. Survey, Township 1n, rigging up.

**Howard County**

Lockhart & Carey's No. 1 Otis Chalk, 330 feet north and east SW cor. NW, Section 114, Block 29, W. & N. W. Survey, machine on ground; No. 1 W. T. Scott, 330 feet north and east SW cor. N half SE, Section 86, Block 29, W. & N. W. Survey, rigging up.

**Coleman County**

Burke-Greis Oil Co. and Gwinnup's No. 8 J. C. Dibrell, 4,250 feet south and west NE cor. J. W. Hicks Survey 265, being 250 feet south and west NE cor. their 44 acres, rig up. Independent Oil & Gas Co.'s No. 4 J. C. Dibrell, 3,100 feet south and 1,450 feet west of NE cor. same survey, being 750 feet north and 250 west SE cor. their 80 acres, rig up; Kirby Petroleum Co.'s No. 2 J. C. Dibrell, 3,300 feet south and 4,100 feet west NE cor. J. W. Hicks Survey, being 685 feet north and 150 feet west SE cor. their 87-acre lease, rig up; Midwest Exploration Co.'s No. 1 J. P. Morris, 2,310 feet south and 990 feet west NE cor. A. Newschaffer Survey No. 950, rig up. Ramsey & Maxey's No. 1 J. W. Harris, 150 feet north and east SW cor. northeast 80 acres J. W. Harris 700 acres Lot 3, Asa Wickson Survey No. 168, machine. A. Urban's No. 1 G. M. Gray, 1,680 feet north and 220 feet west SE cor. W half G. M. Gray 640 acres of Mark Izod Survey Uo. 172, rig. Gilman and others' No. 1 Mrs. M. C. Dibrell, 660 feet north and 3,050 feet west SE cor. Section 26, H. T. & B. Survey, A-1,237, location.

Burke-Greis Oil Co. and Gwinnup's No. 4 J. C. Dibrell, 4,250 feet south and 3,700 feet west NE cor. J. W. Hicks Survey No. 265, being 250 feet south and east NW cor. their 40-acre lease, spudding. Independent Oil & Gas Co. and others' No. 3 J. C. Dibrell, 3,100 feet south and 2,150 feet west NE cor. J. W. Hicks Survey No. 265, being 750 feet north and 250 feet east SW cor. their 80-acre lease, spudding. Midwest Exploration Co.'s No. 3 J. C. Dibrell "A," 3,750 feet south and 3,400 feet west NE cor. same survey, being 250 feet north and 750 feet west SE cor. its 80-acre lease, rigging up; No. 4, 250 feet north and east SW cor. its "A" lease, rigging up. White Eagle Oil & Refining Co.'s No. 2 J. C. Dibrell, 750 feet north and 250 feet east SW cor. its 80-acre lease, same survey.

**Brown County**

Blair & Kell's No. 7 Jesse Byrd, 150 feet north and 1,950 feet east SW cor. Jesse Byrd 80 acres in N. B. Mitchell Survey No. 150, machine. A. J. Brown's No. 1 D. F. Weedon, 500 feet south and 200 feet east NW cor. D. T. Weedon 61-acre tract, H. J. Kern Survey, A-1,073, rigging up. Conway Brothers' No. 6 W. M. Wooldridge, 1,200 feet south and 1,900 feet east NW cor. E. T. R. R. Survey No. 157, A-297, being 182 feet north and 150 feet west SE cor. their 60-acre tract, rig up. Gibson Oil Co.'s No. 1 W. G. White, 938 feet north and 150 feet east SE cor. J. C. Ryan Survey No. 635 and located in D. B. Vernon Survey, A-935, spudded and shut down. J. K. Hughes Development Co.'s No. 12 Arledge, 150 feet north and 2,250 feet east SW cor. J. T. Arledge 192-acre tract, N. B. Mitchell Survey No. 150, machine; No. 1 Josie Wooldridge, midway east and west lines and 150 feet south of north line of south 38 acres of west 65 acres J. Wooldridge 160 acres, H. B. Gaines Survey, A-1,400, drilling at 425 feet. Humble Oil & Refining Co.'s No. 1 E. P. and W. H. Kilgore "B," 200 feet south and west NE cor. Section 2, Juan Delgado Survey No. 785, drilling at 690 feet. Keough Brothers' No. 1 W. H. Cook, 1,500 feet south and 1,800 feet west of NE cor. D. Linville Survey No. 1 and located on the W. H. Cook 144 acres, rig. Mahlstedt Oil Co.'s No. 1 W. H. G. Chambers, 680 feet north and 150 feet west SE cor. west 50 acres of Chambers 401 acres in G. Logan Survey No. 147, location. McLester Oil Co.'s No. 3 Josie Wooldridge, 500 feet south and 175 feet east NW cor. of east 96 acres of J. Wooldridge 160 acres, H. B. Gaines Survey, A-1,400, rig. Pandem Oil Corp.'s No. 3 R. L. Westerman, 450 feet south and 150 feet east NW cor. its 62.5-acre lease in Westerman 172.5 acres of N. B. Mitchell Survey No. 150, machine. Ray Oil Co.'s No. 1 W. A. Stout, 830 feet south and 150 feet east NW cor. Lot 3, W. B. Smith Survey, drilling at 500 feet. Schaffner & Ramsey's No. 1 E. D. Henson, 150 feet south and east NW cor. south 55 acres of E. D. Henson 115.5 acres, G. Logan Survey No. 147 and J. H. Prather Survey, A-1,075, location.

Barbour Oil Co.'s No. 2 J. P. Newton, 150 feet north and 1,350 feet east SW cor. J. P. Newton 162.5 acres, N. B. Mitchell Survey No. 150. Blair & Kell's No. 5 Jesse Byrd, 150 feet north and 1,350 feet east SW cor. Jesse Byrd 80 acres, same survey, drilling at 200 feet; No. 6, 150 feet north and 1,650 feet east SW cor. same 80 acres, drilling at 600 feet. B. Carter and others' No. 1 W. T. Nixon, 160 feet south and 740 feet east NW cor. SW, Section 77, H. T. & B. Survey, drilling at 1,000 feet. Conway Brothers' No. 8 W. H. G. Chambers, 900 feet north and 150 feet east SW cor. south 50 acres of west 100 acres of east 200 acres of Chambers 401 acres, G. Logan Survey No. 147, drilling at 600 feet. Conway Brothers' No. 8 G. W. Pickett, Jr., 575 feet south and 160 feet east NW cor. east 100 acres of Pickett 150 acres, same survey, drilling at 340 feet. Curry & Moore's No. 2 J. H. Prather, 775 feet south and 150 feet east SE cor. J. G. Gaines 100-acre tract, William B. Travis Survey No. 148, and located in William L. Swain Survey No. 145, rigging up. Fagg and others' No. 2 G. T. Butler, 450 feet south and east NW cor. east 96 acres of south 150 acres of G. T. Butler 300 acres John McGloin Survey, A-1,499, spudded. S. S. Herring's No. 3 J. H. Prather, 775 feet south and 150 feet west SE cor. J. G. Gaines 100 acres, William B. Travis Survey No. 148, and located in William L. Swain Survey No. 145, machine. Humble Oil & Refining Co.'s No. 4 E. L. Stover, 1,040 feet south and 200 feet east NW cor. Section 4, Juan Delgado Survey No. 785, drilling at 413 feet. L. Mendenhall and others' No. 11 J. W. Newton, 750 feet south and 155 feet west NE cor. their 80 acres in J. W. Newton 472-tract, William Miller Survey No. 149, rig. R. C. McCarter and others' No. 5 J. H. Allen, 550 feet north and 990 feet west of SE cor. Section 7, Juan Delgado Survey No. 785, location; No. 2 Leatherwood, 150 feet south and west NE cor. A. Leatherwood 193 acres in Section 11, Juan Delgado Survey No. 785, drilling at 1,105 feet. Phillips Petroleum Co.'s No. 4 T. L. Dunn, 150 feet south and 1,104 feet west of NE cor. south 80 acres of Section 12, J. Delgado Survey No. 785, fishing at 290 feet. Schaffner & Wilson's No. 10 W. A. Prather, 1,000 feet south and 450 feet east NW cor. E half W. A. Prather 107 acres in William Miller Survey No. 149, drilling at 600 feet. Simms Oil Co.'s No. 8 G. B. Gaines, 450 feet south and 600 feet east SW cor. of east 100 acres of north 200 acres and located on the west 100 acres of the east 180 acres of the south 226.3 acres of G. B. Gaines 426.3 acres, William Miller Survey No. 149, drilling at 365 feet. The Texas Company's No. 13 T. L. Dunn, 150 feet south and 276 feet east of NW cor. of south 40 acres of north 71 acres, Section 12, Juan Delgado Survey No. 785, drilling at 1,040 feet; No. 14, 150 feet north and 1,321 feet west SE cor. of south 40 acres of north 71 acres, drilling at 750 feet; No. 15, 590 feet south and 1,016 feet west NE cor. of south 40 acres of north 71 acres, same section, spudding. Valley Oil Co.'s No. 1 A. B. Teston, 150 feet north and east SW cor. of Teston 50 acres in P. Curlong Survey No. 151, spudding. Williamson and others' No. 3 H. A. Hamilton, 1,020 feet south and 150 feet west NE cor. of H. A. Newton 206 acres in Robert Mitchell Survey No. 141, drilling at 1,100 feet.

**Upton County**

Independent Oil & Gas Co.'s No. 1 Emma Wooley, 160 feet southwest of southwest line of William Teer Survey No. 4, A-806, and 330 feet east of east line of S. T. Sapp Survey No. 6 and located in G. C. & S. F. Survey No. 3, A-229. Skelly Oil Co.'s No. 1 O. P. Jones, C SW Section 32, Block 41, T. P. R. R. Survey, Township 4s. Dixie Oil Co.'s No. 4 A. S. Burleson, 330 feet south of north line and 330 feet northeast of southwest line of Thomas C. Jones Survey No. 100, A-746; No. 1 A. S. Burleson "A," midway between northeast and southwest lines and 330 feet southeast of northwest line of J. Midever Survey No. 2, A-749; No. 2 E. S. Hughes, 330 feet south of north line and 330 feet northeast of southwest line of William Teer Survey No. 4, A-806. Marland Oil Co.'s No. 6 Sanger Brothers, 400 feet southeast of NW cor. Thomas C. Jones Survey No. 100, A-746, and 160 feet southwest of northeast line of Sanger Brothers' 640 acres in J. H. King Survey No. 1, A-1,033; No. 7, 330 feet north and west of SW cor. Section 18, Block 3, M. K. & T. Survey, and located in J. H. King Survey No. 1, A-1,033.

**Reagan County**

The Texon Oil & Land Co.'s No. 1 University, 330 feet north and east SW cor. Section 19, Block 9, University land, building rig.

## D. W. MOFFITT NOW DIRECTOR

D. W. Moffitt, vice president of the Mid-Continent Petroleum Corp., Tulsa has been elected a member of the board of directors of the company. Mr. Moffitt has charge of the sales and manufacturing departments of the company.

XUM

## GRAY COUNTY WELL PROVES UP PAMPA AREA

(Continued from Page 47)

the oil is there the operators confidently expect the output will soon be going up by tens of thousands of barrels each week.

The Westex Oil Co. had about the best week enjoyed by any concern in the field. This company's No. 2 Whittenburg in Section 13, Block Y, was deepened to 2,960 feet and shot with 80 quarts from 2,910-50 feet. The next 24 hours' production was 1,674 bbls. No. 3 on the same lease flowed 1,750 bbls. natural from sand lime at 2,888 to 2,940 feet. The Apex Oil Co.'s No. 1 Smith, Section 11, Block Y, M. & C. Survey, was flowing by heads 450 bbls. in 16 hours from pay at 2,880-2,935 feet while cleaning out. It had not been shot, but was reported last week as plugging back preparatory to shooting. The Canadian River Oil Co.'s No. 4 Kingsland in Section 4, Block Y, was completed for 30 bbls. for the present and will be shot later. Cockrell & McIlroy's No. 1 Smith, Section 14, Block Y, was shot with 300 quarts at 2,907 to 3,006 feet and made 1,600 bbls. the first 24 hours. It had oil in lime from 2,985-95 feet and total depth was 3,010 feet.

The Dixon Creek Oil Co.'s No. 4 Smith Section 11, Block Y, was drilling at 2,885 feet with 100 feet of oil in the hole. The same concern's No. 18 Smith, Section 14, Block Y, was completed for 200 bbls. the first 24 hours in lime at 2,955-85 feet; No. 29 Smith in Section 5, same block, was shut down for a shot and was flowing 90 bbls. daily from lime at 2,850-2,900 feet, total depth 2,915 feet.

The Drysdale Oil Co. had practically a dry hole in No. 1 J. F. Weatherly, Section 17, Block Y. It was estimated good for 15 bbls. at 3,146-56 feet, total depth 3,172 feet, but was not produced and was completed. The Fly-Blackburn Oil Co. finished up a good one in its No. 1 Weatherly, Section 19, Block Y. It was shot with 330 quarts from 2,976 to 3,047 feet and flowed 1,000 bbls. in the next 12 hours then bridged.

The Gulf Production Co.'s No. 9 Dial and others in Section 34, Block M-23, had a show of oil at 3,009 feet and at 3,019 feet was making about 10 gallons of light oil an hour. The 6-inch was being run and the showing was to be thoroughly tested out.

Heywood and others' No. 1 E. Cockrell, in Section 14, Block Y, was completed without further shooting. It was reported last week as having made 625 bbls. in five days. J. K. Hughes Development Co.'s No. 5-A Kingsland, Section 6, Block Y, was cleaned out and made 70 bbls. daily and it also was marked on the completion list without being shot again. Dan A. Japhet's No. 1 H. E. Smith and others in Section 11, Block Y, was shot with 240 quarts at 2,800-53 feet, total depth 2,862 feet, but no results were noticeable except that the hole bridged and part of the liner was shot off. J. H. Lenix completed his No. 1 Johnson Brothers for 25 bbls. at 2,940-53 feet after plugging back. The Phillips Petroleum Co.'s No. 1 Johnson Brothers-Barnum, Section 64, Block 46, which originally made 300 bbls. at 2,805-10 feet is now down to 40 bbls. daily average for the week. The Relief Oil Co.'s No. 1 H. E. Smith, in Section 11, Block Y, was good for 1,600 bbls. natural the first 24 hours at 2,740-65 feet and was completed. Riley & Holmes' No. 1 H. E. Smith, same section, was flowing 200 bbls. natural at 2,689 feet and was drilling deeper. The Roxana Petroleum Corp.'s No. 2-B Smith, also in the same section, was making about 100 bbls. of fluid, about 25 per cent of which is water. This well was reported last week. The Skelly Oil Co. completed No. 1 Johnson Brothers in the Mary Whitley Survey as a 200-bbl. producer at 2,969-99 feet, the oil being cut to some extent. The Summit Oil Co.'s No. 1 Whittenburg, in Section 13, Block Y, was finally cleaned out and completed for 520 bbls. initial at 2,970-89 feet. The same company's No. 2 Whittenburg, same section, was a 150-bbl. completion at 2,911-56 feet. The Travelers Oil Co.'s No. 2 W. L. Kingsland flowed 1,000 bbls. the first 24 hours following a shot of 180 quarts from 2,913-79 feet.

In Carson County, the Gates Oil Corp. temporarily abandoned No. 2 Burnett which has had a bailer in the hole and has been shut down at 2,957 feet for some time. The Texas Company's No. 4 M. C. Burnett had an initial production of 85 bbls. from granite wash at 2,924-45 feet.

In Moore County, Lee Flowers & Brookins and Marland Oil Co.'s No. 1 J. T. Sneed, Jr., was flowing 1,000 bbls. of fresh water daily between the 15-inch and 20-inch strings. The water is coming from 125 feet and 210 feet and total depth of the hole is 480 feet. The Phillips Petroleum Co.'s No. 1 J. T. Sneed, Jr., was drilling at 2,210 feet. Morton & Co. had the rig up for their No. 1 H. C. Rubert. The Prairie Oil & Gas Co.'s No. 2 Sneed, Section 26, Block 6-T, T. & N. O. Survey, was spudded at 420 feet.

In Gray County, Clark & Jones' No. 1 Worley & Reynolds, Section 83, Block 3, I. & G. N. Survey, was drilling at 2,405 feet. The Wilcox-Pampa Oil Co.'s No. 2 Worley & Reynolds in Section 59, was still fishing tools; No. 4 in Section 62 was drilling with rotary at 2,100 feet.

In Wheeler County, the Midwest Exploration Co.'s No. 1 J. M. Shelton, Section 21, Block A-8, was drilling at 2,000 feet. Scott & Barnett staked a new location for their No. 1 J. H. Jackson and the Upham Gas Co. likewise staked a new one for their No. 1 fee. Hal H. Vaughn's No. 1 Roger O'Gorman was drilling in granite at 2,035 feet.

In Potter County, the Gulf Production Co.'s No. 1 J. A. Jones, Section 3, Block 1, was rigging up.

### Panhandle First Reports

As mentioned last week, the Gulf Production Co. started more than a score of new tests in the Texas Panhandle. Following are the foot measurements of the locations: No. 1 W. S. Christian, 330 feet south and 325 feet east of NW cor. Gulf's 40-acre lease in the W. S. Christian Survey No. 31-A, Block V, A-1,232, building rig; No. 11 Dial and others, 330 feet north and east of SW cor. Section 90, Block Z, G. C. & S. F. Survey, building rig; No. 12, 330 feet north and west of SE cor. SW, Section 90, Block Z, rig; No. 13 Dial and others, 150 feet north and 400 feet east of NW cor. W. D. Twitchell Survey No. 38, Block V, and located in Section 1, Block 1, H. & G. N. Survey, rig; No. 14 C. L. Dial and others, 150 feet north and 1,704 feet east of NW cor. W. D. Twitchell Survey No. 38, Block V, and located in Section 1, Block 1, H. & G. N. Survey, building rig; No. 15 Dial and others, 150 feet north and 1,704 feet east of NW cor. Section 24, Block 47, H. & T. C. Survey, moving in material; No. 8 E. B. Johnson and others, 990 feet north and 330 feet east of SW cor. Section 66, Block 46, H. & T. C. Survey, rig on ground; No. 9, 330 feet south and east of NW cor. of Gulf's 160-acre lease in Section 70, Block 46, H. & T. C. Survey, material on ground; No. 10, 330 feet south and west of NE cor. same lease, location; No. 11, 330 feet north and west of SE cor. same lease, location; No. 12, 330 feet north and east of SW cor, Section 70, Block 46, H. & T. C. Survey, moving in tools; No. 2 J. A. Whittenburg "B," 330 feet south and east NW cor. SW, Section 89, Block Z, G. C. & S. F. Survey, rig; No. 3, 330 feet south and 1,650 feet east of NW cor. SW, Section 89, building rig; No. 4 E. B. Johnson and others, 330 feet south and west of NE cor. of Gulf's 160 acres in Section 66, Block 46, H. & T. C. Survey, rig; No. 5, 1,650 feet south and 330 feet west of NE cor. of Gulf's 160 acres, building rig; No. 6, 330 feet north and 1,000 feet west of SE cor. same 160 acres, rig; No. 7, 330 feet north and 1,000 feet east of SW cor, same 160 acres, building rig; No. 3 J. A. Whittenburg "E," 400 feet north and 1,013 feet east of SW cor. of Gulf's 160 acres in Section 65, Block 46, H. & T. C. Survey, building rig; No. 4 J. A. Whittenburg "E," 400 feet north and 1,013 feet west of SE cor. same 160 acres, building rig; No. 5, 1,060 feet north and 400 feet west of SE cor. same 160 acres, rig.

The exact locations of the 26 other new tests reported this week, including 8 new ones by the Prairie Oil & Gas Co. on the J. F. Weatherly lease will be given later.

## NORTH TEXAS MARKET IMPROVED BY EXPORTS

WICHITA FALLS, Tex., June 14.—North Texas refined market was much improved Monday as a result of the active buying of gasolines by The Texas Company, the Gulf Refining Co. and the Galena Signal Oil Co. during the week.

A substantial part of the orders for higher gravity gasolines bought for export by The Texas Company and the Galena Signal Oil Co. were placed with north Texas refiners as was all of the U. S. Motor gasoline purchased by the Gulf Refining Co. In addition to this, scattered purchases of gas oil continued to be made by the Atlantic Refining Co.

The purchases of gasoline were considered of more benefit to this district than to any other part of the Mid-Continent due to exceptional weakness of higher gravity grades the previous week following a reduction of ¾-cent in export postings. North Texas refiners for several weeks have been heavily burdened with stocks of export grades of gasoline so the purchases the past week will remove much of the distress material, which had forced markets of these gasolines within a close margin of U. S. Motor (58-60 437) gasoline prices.

The export purchases of the 64-66 375 gasoline in this district were made on the basis of 12.15 cents, or in other words, the Standard Oil Co. of Louisiana (New Jersey) posting at Baton Rouge less the freight rate. The 60-62 400 product, was purchased from 11¾ to 12 cents but there was little of this grade bought in this district.

Between 150 and 200 cars of U. S. Motor gasoline were reported purchased by the Gulf Refining Co., orders for this ranging from 11⅛ to 11⅝ cents.

The purchases came in time to check a very rapid decline in gasoline prices due to the extreme lack of demand for any of these grades and were of sufficient size as to instill a general feeling of firmness in the situation. Practically all gasoline prices were up a quarter of a cent from what they were previous to the entry of the buyers in the market, although they were but slightly higher than a week ago.

The export orders, until late Monday had failed to bring about any increased demand for natural gasolines as had been anticipated. Manufacturers, however, developed an inclination to hold off sales at low prices as long as possible in expectation of a demand.

The continued slowness of natural gasoline demand was explained in the report that practically all the orders for export gasoline could be filled from stocks at north Texas refineries and as a result would not necessitate a call for a great amount of naturals.

During the week there was an apparent effort on the part of north Texas sellers to dump natural gasolines on the market and as a result some exceptionally low prices were reported with the A grades quoted at 9¼ cents; the B grades from 9 to 9¼ cents and Grade C at 9 cents.

Kerosene sales reported during the week were very slight and prices dropped off another cent. Fuel oil also was inactive with ample material available at $1.25 from this district. Reports on the extent of gas oil purchases were somewhat varied but it is known that sufficient material was bought to clean up the market and firm prices at 4 cents. Estimates on these purchases range from 1,000,000 gallons up. Distillates were quiet but prices steady.

## Burke Will Listen to Oil and Gas Men Argue On Restoring Pressure

Representatives of oil producing companies, casinghead gasoline manufacturers, natural gas companies operating in the Osage Nation in Oklahoma and representatives of the Osage Tribe of Indians are in Washington, D. C. this week in conference with the Commissioner of Indian Affairs on the question of restoring the pressure on the oil sands in Osage County for the purpose of increasing the production of oil in the old pools in that county.

The use of gas compressors in Osage County to force gas into the sands to extract the dormant oil is complicated by reason of the divided rights of the oil lessee and the gas lessee in that county and the rights of the casinghead gasoline manufacturer, as well. For the past three months operators in the Osage Nation have been holding conferences through the Osage Oil & Gas Lessees Assn., as a forum in an effort to define the rights of each class but they have not been able to come to a decision satisfactory to all and it was agreed to take the matter before the Department of the Interior at a general hearing on Tuesday, June 15. It is considered quite likely that even though the Secretary of the Interior makes a decision, the question will finally have to be thrashed out in the courts in a test suit. The situation in the Osage Nation is different than in territory where the ordinary commercial oil and gas lease prevails and the situation is so involved and there are so many conflicting interests that it may take a long time before the question is fully decided.

### POSTPONED UNTIL WEDNESDAY

WASHINGTON, D. C., June 15.—About 25 representatives of the oil, gas and casinghead gasoline industries operating in Osage County, Oklahoma, gathered in the office of the Commissioner of Indian Affairs today to discuss the ownership of natural gas remaining after the casinghead gasoline has been removed, and other matters in connection with the proposed use of gas compressors to increase oil production. Commissioner Burke was detained in court, so that the hearing was postponed until Wednesday.

## GAS LESSEE ENTITLED TO DISCOVERY VALUE

WASHINGTON, D. C., June 15.—A gas lessee on property on which there exists a contemporaneous oil lease is entitled to discovery value for depletion purpose as to all wells discovered on its leasehold tract and taken over from the oil lessee under lease option. This important ruling is by A. W. Gregg, solicitor of internal revenue, in a construction of Section 214 (A) of the Revenue Acts of 1918 and 1921.

The opinion holds that this policy should obtain whether payment therefore was made by the immediate reimbursement of the oil lessee for his development costs or whether reimbursement was consummated by payments under the gas contract.

### H. J. CONNOLLY DIES

Henry J. Connolly, independent oil operator, living at 1620 S. Victor Ave., Tulsa, died Monday morning. He moved to Tulsa in 1911 and for two years remained in Oklahoma with a partner, S. T. Mallory, operating in the Muskogee district. Later he drilled several wells in Indiana for The Texas Company. In 1915, he returned to Tulsa. He was a brother of the late D. F. Connolly, who died while making a speech in behalf of St. Johns hospital, Tulsa, January 7. Before moving to Oklahoma the brothers conducted the Connolly Oil Co., in western Pennsylvania and West Virginia.

# CONSERVATION SCHOOL ATTRACTS OVER 100 GAS MEN FROM FOUR STATES

BARTLESVILLE, Okla., June 11.—More than 100 representatives of the larger natural gas companies of the Mid-Continent area assembled here Wednesday and Thursday for a conservation school conducted under the auspices of the Oklahoma Utilities Association. The attendance was representative of the natural gas industry of Kansas, Missouri, Texas and Oklahoma. It is the first school of its kind ever to be held in this section. Twenty five companies and forty cities and towns were represented in the school.

H. L. Montgomery, manager of the gas division of the Empire Companies, who is chairman of the gas division of the Utilities Association, was largely responsible for the creation of this school, which will be an annual event in Bartlesville, and Logan A. Carey, chief engineer of the Oklahoma Gas & Electric Co. of Oklahoma City, was chairman of the committee in charge of the first school.

Mr. Montgomery in calling the conference announced the purpose of the meeting as one to aid "in the development of more uniform methods for the efficient handling of natural gas. In this business we are the custodians of a great natural resource. It is our obligation to see that as much of this natural resource is made available to the use of the people, with as little waste on either our part or theirs, as possible."

E. F. McKay, manager of the Oklahoma Utilities Association, and a former Bartlesville man, addressed the conference complimenting the men of the natural gas industry on the interest that was being manifested in this most important subject of conservation.

### Use of Gas in Oil Wells

At the afternoon session, Wednesday, C. E. Brock, superintendent of gas production for the Empire Companies, discussed methods of "conservation of gas from combination oil and gas wells." This brought out a liberal discussion of the various experiments that are being made with the use of gas in the recovery of oil.

Keith Clevenger, of the public relations department, Empire Companies, also addressed the school on some public relations aspects of the natural gas business. In part Mr. Clevenger said: "If we would continue to build our industry we must not lose sight of the fact that regardless of how much progress we make as operators, if we do not keep up the educational work concerning our business, both within as well as outside the industry, much of our mechanical and operating progress will be for naught. Every operation of our business, every dollar of invested capital, is charged with a definite obligation of public. Inasmuch as most of these operations and most of the investment in the natural gas business is of such a nature that most of it is concealed from the public eye — buried underground, or situated in remote, out-of-the-way places—it is incumbent on each of us, whether we work in office, a compressor station, on the pipeline, or wherever it may be assume our share of the public relations or educational responsibility concerning our business. Ours is the responsibility to use every effort and opportunity to improve public understanding of our business and its value to humanity."

### Bennett's Address

The opening feature was an address by E. O. Bennett, of the U. S. Bureau of Mines, Bartlesville, on "Conservation of Gas at Producing Wells and a Substitute for Open Flow Measurement." Mr. Bennett reported results of experiments and studies made by the Bureau of Mines dealing with fundamental factors in the relation between oil and gas production and in methods of increasing the recovery of oil by proper use of gas in depleted fields, a subject to which the bureau is giving particular attention and in connection with which results of importance are anticipated. The speaker explained the results of operation on approximately 100 wells operating under pressure control method in place of open flow measurement as a test or the volume of gas in gas wells, stating that the methods developed had given greater accuracy of measurement and would greatly conserve the gas in the well. He said that the regulation restricting the taking of gas to a definite percentage of the total flow involved serious waste and was seriously detrimental to the well. He likened the open flow test as a measure of the volume of gas in a well to the opening of a valve and blowing of steam as a test of the steam in a steam boiler, declaring the method in question to be as logical and as valuable in the one case as in the other.

### Erecting New Laboratory

In the afternoon the members of the conference visited the Bureau of Mines, inspecting laboratory equipment and having various experiments in progress explained by members of the Government staff. A new laboratory building is being erected to further the work of research in the relation between oil and gas production. The visitors were interested in learning that in many of the experiments made at the Bureau of Mines it is necessary to design and construct practically all the apparatus used, the research being along wholly original lines.

W. J. Armstrong, director of the conservation bureau of the State Corporation Commission, speaking on behalf of the commission, pledged its cooperation in any regulations suggested by the gas men that would aid in the conservation of natural gas. "This is a step forward," said Mr. Armstrong, "and if the natural gas men of Oklahoma, as a result of this meeting, will carry the message of the need of greater conservation methods in the handling of natural gas throughout the state, it will bring the importance of this measure to the attention of the people and greatly aid us in our work, which is aimed at the protection of the industry as well as the consumers of natural gas."

H. J. Lowe, of the United States Geological Survey, Muskogee, voiced a similar thought and pledged the co-operation of his department to the assistance of oil and gas operators in the conservation of natural gas. He urged that the men in attendance at this meeting carry to the various sections of the state the program for conservation as outlined in the Bartlesville meeting as an incentive to others of the industry as well as to the public who use this great natural fuel for the need of greater economy and efficiency.

Wednesday evening a smoker was given for the visiting delegates.

### Co-operation Plans

The closing session of the school marked a most gratifying effort on the part of the natural gas companies of Oklahoma, Texas and Kansas, to arrive at some mutual and co-operative plans for the solution of the problems of gas production and transportation.

In a brief address to the members of the school this morning, H. R. Straight, general manager of the Empire Companies, expressed his pleasure at the earnest manner in which everyone in attendance was attending the sessions and entering into the discussions of the various subjects. "It is a most significant indication of the sincerity of the men of the natural gas industry in this most vital problem of conservation, when more than 100 men leave their operating problems and come together in a meeting of this nature," said Mr. Straight. He pointed out the need of conservation of natural resources in every direction, and stated that he hoped this meeting would be fruitful of more constructive measures for the protection of the gas and oil resources of the Mid-Continent Field, not only through the co-operation of the various companies but through the education of the people of this section of the value of this great natural fuel. to the future generations," said Mr. Straight, "and as such we owe it first to our security-holders and secondly to the public we serve to not only adapt these methods of conservation to our operating practices, but to impress our customers and the public with the necessity and the value to their welfare of such a conservation program."

E. A. Clark, superintendent of measurements for the Oklahoma Natural Gas Co., Tulsa, delivered a most interesting talk on "Pipe Coating and Cleaning," and its relationship to gas conservation at the morning session.

E. L. Rawlins of the Bureau of Mines read an illuminating paper on transmission line leakage and its prevention, which he illustrated with stereopticon slides, showing results of research work in this line, which the bureau had carried on for several years in co operation with the Natural Gas Association of America.

J. H. Baxter, engineer of the Oklahoma Gas & Electric Co., Oklahoma City, discussed this same problem from the standpoint of the local distributer of natural gas.

J. I. Cormany, of the Gas Service Co., Kansas City, read H. D. Hancock's paper on correcting use in utilization, urging the importance of informing and educating natural gas consumers regarding its proper use as a part of the program of natural gas conservation.

Logan Cary, of Oklahoma City, chairman of the Conservation School Committee, summed up the results of the meeting in an interesting manner, after which H. L. Montgomery pronounced the school adjourned.

### Registration List

Those registering at the meeting follow: Edwin F. McCay, Oklahoma City; B R. Bay, Bartlesville; W. V. Russell, Hominy; Edward C. King, Oklahoma City; J. A. Stevens, Caney, Kans.; Hughes B. Davis, H. L. Montgomery, J. E. Worsley, Bartlesville; H. F. Adlam, Arlington, Tex.; J. H. Baxter, Oklahoma City; W. T. Watters, Commerce; P. J. Emington, L. L. Baker, Caney, Kans.; Earl Cannedy, Blackwell; E. T. Cofield, Tonkawa; A. L. Griffith, Cushing; R. E. Brigham, Bartlesville; L. M. Batten, Independence, Kans.; C. M. Jennings, Bartlesville; C. W. Robbins, Ponca City; Frank Harriger, Pawhuska; Roy Corn, Independence, Kans.; George Baird, Bartlesville; J. I. Cormany, Kansas City, Mo.; C. E. Brock, D. B. Dow, E. N. Armstrong, F. D. Frank, N. D. Holman, E. O. Bennett, M. Walker, W. G. Wilson, Bartlesville; Logan Cary, Oklahoma City; V. C. Jarboe, Bartlesville; Frank Bott, Chicago, Ill.; Roy Gearheart, Lawrence, Kans.; F. S. Coyle, Kansas City, Mo.; M. L. Wiand, Cushing; R. F. Danner, Oklahoma City; F. D. Bruce, Tulsa; W. P. Benedict, Winfield, Kans.; Harry McDaniel, Tallant; Frank F. Finney, Bartlesville; J. W. Ryan, Okmulgee; Burr Wiand, Grenola, Kans.; C. M. VanSlyke, Haskell; S. L. Shores, Muskogee; C. S. Smith, Petrolia, Kans.; H. C. Nunn, Kansas City; C. F. Comstock, Tulsa; J. J. Corrigan, Commerce; L. D. Looney, Nowata; E. M. Rowland, Tallant; H. B. Milam, Bartlesville; E. C. Marsh, Dilworth; J. R. Barnhart, Independence, Kans.; H. L. Hunnsaker, F. D. Renfro; George Yoe, T. H. Beals, Loren Riggs, A. V. Wynne, Bartlesville; W. J. Armstrong, Oklahoma City; T. C. Brill, J. W. Fulton, F. D. Krumpeln, T. F. Patterson, George Roth, C. L. Bailey, Bartlesville; H. J. Duncan, Muskogee; O. W. Price, Bartlesville; L. Bunch, Chandler; H. R. Park, Bartlesville; P. A. White, J. H. Tumbelson, Shamrock; L. W. Clark, Bartlesville; H. N. Peters, Blackwell; Keith Clevenger, Bartlesville; E. A. Clark, Tulsa; Robert W. Hendee, Okmulgee; D. A. Martin, Bartlesville; H. B. Bell, Tollie Weedin, Tulsa; E. L. Rawlins, Bartlesville; F. T. Parks, Joplin, Mo.; H. J. Lowe, Muskogee; E. C. Cortelyou, E. C. Chaney, Bartlesville; H. D. Bell, Tulsa; A. J. Nagel, Pawhuska; A. J. Kerr, Tulsa; J. P. Simpson, Dewey; R. H. Lusky, J. A. Whitcomb, Guthrie; L. A. Farmer, Tulsa; W W. Bruce, Chandler; R. H. Ulrich, B. L. Maulsby, Tulsa; A. L. Milam, Cambridge, Kans.; E. E. Lambe, C. A. Gibson, W. M. Hott, L. D. Williams, T. W. Johnson, Bartlesville; E. F. Dean, Tulsa; F. H. Mugg, Muskogee; M. V. McAtee, H. M. Walker, Mounds; W. L. Axsom, J. W. Talbot, Bartlesville; H. L. Siebenthaler, Nowata; Orville Shultz, D. E. Taylor, W. D. Rorschach, Bartlesville; J. H. Kendall, Ponca City; J. W. George, E. H. Hickman, H. R. Straight, Bartlesville

## OIL POLLUTION LEFT TO NATIONAL LAWS

WASHINGTON, D. C., June 15.—Efforts of American and British delegates to the preliminary conference on oil pollution to obtain an agreement for total prohibition of the discharge of oil and oily substances from vessels on the high seas were abandoned at a session of the committee of the whole. Instead of prohibition a tentative agreement was reached on a system of zoning under which vessels will be forbidden to discharge oil in navigable waters within a fixed distance off shore.

As tentatively agreed upon, subject to final approval of the conference, the zoning resolution provides that the distance offshore shall not be less than 50 miles nor more than 150 miles and that no zone may be established by a nation without the consent of neighbor nations. In effect this means, delegates say, that each nation is left to work out its own zoning system.

## PREMIUM GASOLINE MARKETED BY SINCLAIR

CHICAGO, June 15.—The Sinclair Refining Co. has started the marketing of a premium gasoline. The distribution at the present time is confined to Indianapolis. It is understood, however, that the company expects to distribute the product which sells at a 3-cent premium over the usual domestic grade, throughout all of its marketing territory.

The new gasoline, like other premium gasolines which have been announced by other companies recently, is said to have antiknock properties with ease in starting including more power. The gasoline is sold under the trade name of "HC" meaning high compression.

## NEW JERSEY OFFICERS ON ANNUAL INSPECTION

NEW YORK, June 12.—Standard Oil Co. of New Jersey officers have left on their annual trip of inspection of the company's properties. They will stop at New Orleans, Baton Rouge refinery, Humble Oil plant at Houston, Big Lake and Panhandle pools in Texas, Artesia Pool, New Mexico, Tulsa, Okla., and Independence, Kans., returning to New York on June 22. Included in the party are: W. C. Teagle, president; S. B. Hunt, E. M. Clark and J. A. Moffet, vice presidents; Richardson Pratt, E. P. Salisbury, E. G. Barber and J. A. Van Wynen. Mr. Moffett will return to New York from Baton Rouge, at which point Cal Clarke, vice president of Standard Oil Co. of Louisiana, a subsidiary, will join the trip. Humble Oil officials, including W. S. Farrish, president and H. C. Weiss, vice president, will join the party at Houston.

## DEATH OF JAMES MURTY

Many old-time oil men who operated in the Pennsylvania and later the Illinois oil fields will learn with regret of the death of James Murty, hotel man, who conducted first class hotels and restaurants in the oil country towns from the early 80s up to about 15 years ago. Mr. Murty died in a hospital in Batavia, N. Y., on June 11. He was 72 years of age. In recent years he had successfully operated a picnic ground and high class road house near Bradford, Pa. As a host, the genial Jim Murty was famous and he numbered hundreds of prominent oil men among his close friends.

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## HANDLING AMARILLO OIL BIG PROBLEM

(Continued from Page 37)

To heat the entire length of the line is a proposition which seems impractical and heat is essential to the success of pipeline projects in this area. Once the critical temperature of 55 degrees is reached, the receipts of oil at the far end of the line will stop automatically.

To establish auxiliary pump stations at less than the regular 30-mile intervals and furnish heat to be introduced to the lines offers one possible method of overcoming the obstacle, but even if it could be accomplished, it would make an almost prohibitive transportation cost.

If some chemical could be introduced which would generate sufficient heat to maintain the temperature of the oil, and at the same time do no injury to the crude, it would make the field assume a more important aspect for with assured pipeline facilities the Panhandle's future would be more rosy.

In the matter of cut oil, the Panhandle is also different. When oil is cut (or has a water and b.s. content of more than 2 per cent )it is unsuitable for pipeline acceptance, and must be treated with one of the especially prepared chemical compositions designed for that purpose. Steam treatment sometimes renders the oil suitable for pipe line shipments, but in most cases the preparations are required.

The Panhandle oil differs from other oils in this respect also, for when it is cut, the most of the preparations will not remove the objectionable matter.

This phase of the oil offers the chemical engineer a great opportunity for study, and fame will crown the one who solves this problem. To date there has been no generally satisfactory solution of the treating process of emulsified oil in this great field.

Unless some solution of these several problems is forthcoming, the refineries will probably be built in the field for if the mountains will not come to Mahomet, then Mahomet must go to the mountains.

### STATE LEASE SALE

Commissioners of the Land Office of Oklahoma will receive bids until 2 p. m., June 22 on the following land in Kingfisher County: South half northwest quarter Section 16-19n-5w, 80 acres; SE quarter, Section 16-19n-5w, 160 acres; and SW quarter, Section 16-19n-5w, 160 acres. Bids will be received until 2 p. m., July 13, on the following tracts in Cotton County; NE, Section 36-1s-11w, 160 acres; and SE, same section, 160 acres.

## PETROLEUM SECURITIES WERE ACTIVE AND FIRM

(Continued from Page 167)

cents a share, payable July 1, to stockholders of record June 15. This places the stock on an annual dividend basis of 80 cents, compared with 60 cents previousiy.

The White Eagle Oil & Refining Co. has declared a regular quarterly dividend of 50 cents a share, payable July 20, to stockholders of record June 30.

The Pan American Petroleum & Transport Co. has declared quarterly dividends of $1.50 a share on the common and class B common stock, both payable July 20, to stockholders of record June 30. Mexican Petroleum, Ltd., of Delaware, has declared a regular quarterly dividend of $3 on the common and $2 on the preferred, both payable July 20, to stockholders of record June 30.

**Royal Dutch Co.**

Royal Dutch Co. reports for the year ended December 31, 1925, net profit of 94,500,194 guilders. In its annual report the importance of the motor car industry and the development of air traffic on the oil industry is pointed out. Total crude oil production decreased to 12,890,131 tons in 1925, from 13,442,138 tons in 1924. In the Dutch Indies, the company's production showed an increase, while in Mexico it decreased to 1,780,000 tons in 1925, from 2,170,000 tons in 1924. The Royal Dutch groups in the United States in 1925, produced as follows: Roxana Petroleum Corp., 2,327,246 tons; Shell Co. of California, 3,309,153 tons. Net profit in 1925 was 94,500,194 florins. Dividends totaling 23 per cent were paid.

**Shell Transport & Trading Co., Ltd.**

Shell Transport & Trading Co., Ltd., reports for year ended December 31, 1925, net profit of £4,818,350 after expenses and other charges, comparing with £4,-816,910 in 1924.

Profit and loss account for 1925, compares as follows:

| | 1925 | 1924 |
|---|---|---|
| Total inc. | £4,859,969 | £4,858,594 |
| Exp., etc. | 41,619 | 41,684 |
| Net profit | £4,818,350 | £4,816,910 |
| Prev. surp. | 231,625 | 230,084 |
| Total surp. | £5,049,975 | £5,046,994 |
| Dividends | *4,817,433 | 4,815,370 |
| P. & L. surp. | £ 232,542 | £ 231,624 |

*Includes £100,000 first preference dividends, £350,000 second preference dividends, and £4,367,433 dividends on ordinary shares.

**California Petroleum**

California Petroleum Corp. and subsidiaries report for the quarter ended March 31, 1926, net income of $1,246,885 after depreciation, depletion, interest, Federal taxes, etc., equivalent to 69 cents a share (par $25) earned on 1,800,429 shares of stock. This compares with $1,-105,739, or 61 cents a share based on the present share basis, in the first quarter of 1925.

The company is now carrying 6,300,-780 bbls. of crude oil, gasoline and other oil products in storage, an increase of 478,684 bbls. since December 31, 1925.

## TREND OF REFINING IN THE UNITED STATES

(Continued from Page 40)

demand—and fails to find a corresponding seasonal demand for fuel oil.

In other words, check the refining run line against the output lines for gasoline and fuel oil and you find a very close parallel in the up and down swings of these three lines. But there is almost no relation between the swings of gasoline stocks and fuel oil stocks. Of course, the answer to this is that the industries built around gasoline constitute an entirely different type of market from the industries that use fuel oil. Nearly all the industries using gasoline are "transportation" industries—automobile, motor truck, motor bus, airplane—while the more diversified industries using fuel oil furnish a more uniform market. Through cracking, the oil industry itself is becoming an increasingly large consumer of its own fuel oil and thereby placing fuel oil in a strategic position as a "price maker" for crude oil.

**Only Two Areas Shift**

In studying the 10 graphs it is most interesting to note that in the past eight years only two areas (Oklahoma-Kansas and the Rocky Mountain) have definitely shifted from the "more fuel oil" to the "more gasoline" class. The other areas that were "more gasoline" in 1918 are "more gasoline" today—and those that were "more fuel oil" in 1918 are "more fuel oil" today. Of course, some of the areas have come close to "shifting over" to the "more gasoline" class—the Texas Gulf Coast, for example. Present indications point to the almost certainty that, during 1926 this area will swing over into the "more gasoline" class.

The Oklahoma-Kansas area, however, is the outstanding example of a major refining area's radical shift in the relative output of its finished products. And while this tendency of "more gasoline and less fuel oil" is present in most of the six "fuel oil" areas the output of these six areas so far exceeds the output of the four "gasoline" areas that the total for the United States stands 33.8 gasoline and 47.5 fuel oil. The country, as a whole, has a long road to travel before "the average barrel" of crude oil produces more gasoline than fuel oil. But that, eventually, this condition will prevail there can be little doubt.

In arriving at that time the determining factor will not be the physical possibility of obtaining more gasoline than fuel oil from "the average barrel" of crude but the economics connected with the relative pressure of demand for gasoline and fuel oil.

It is an interesting commentary on the development of industries that the fundamental stability of any industry is not found within the industry itself but in the group of other industries that use its products.

And it is equally interesting that, under the pressure of ever-expanding markets, the oil industry, whose primary source of gasoline was crude oil, has found a secondary source in fuel oil. Many stories about "substitutes for gasoline" have found their way into the public press—but it is interesting to note that, through cracking of fuel oil, the oil industry has probably found a more prolific source of "real" gasoline than any "substitute" will ever furnish.

## TENDENCIES IN PETROLEUM REFINING

(Continued from Page 180)

mania and Polish deposits which contain the lighter fractions appreciable amounts of benzene, toulene and other higher homologs, the latter in smaller amounts. It is easy to separate these benzene hydrocarbons. A technical process which removes not only the paraffin hydrocarbons but also other groups with it is the liquid sulphur dioxide process of Edeleanu. Another technical process is the treatment of the corresponding limited fraction with nitric acid to produce nitration. The product is a mixture of nitro-compounds which can be separated by well known methods. Both processes are used. The first process is used less to prepare aromatic hydrocarbons than to purify the residual petroleum hydrocarbons (as a refining method for the production of gasoline, kerosene and lubricants); the latter is used for the express purpose of obtaining the nitro-compounds. This industry was very important during the war. Immense quantities of T.N.T. were prepared from petroleum hydrocarbons in this manner.

From what we have said the new tendencies of petroleum chemistry easily become clear to petroleum technologists. It would be Utopian to believe that the way trodden for years leading to the present method of refining and treating could be abandoned just so; these methods will most certainly be the principal ones for a long time to come, but alongside of them will be the increasing consciousness of the importance of and increasing attempts to create values out of those products which were formerly considered troublesome or by-products, and possibly even to increase their output at the expense of those now considered most desirable.

**Suitable By-Products**

With this biased viewpoint the distillation gases after separation of the mechanically carried over liquid or easily condensible fractions were simple burned; the most difficult by-products were the acid tars whether from the refining of crude or cracked distillates. But it is just these by-products containing unsaturated hydrocarbons which are suitable for transforming the technology of petroleum into an industry for producing individual refined products. The ethylene separated from the gas (it is present in large quantities in the gases of the coal industry also) is proving to be an increasingly valuable raw material for the production of individual chemical compounds and the same is true for acetylene. But even the saturated hydrocarbons under proper conditions do not exhibit that inertness which the text books have ascribed to them.

In the last few years advances have been made in this direction and no one can doubt that the way pointed out is adapted to lead the present empirical petroleum technology along the road to a truly chemical basis. To accomplish this not only is a certain optimism necessary but even more the systematic co-operation of science and technology.

The Government of the United States, where the abundance of raw materials of all kinds made wasteful recovery of all products a commonplace, has farsightedly recognized the danger of the continuance of such a system and has constituted the Federal Oil Conservation Board which not only is attempting to avoid the losses due to the escape of the volatile fractions, especially natural gas when new deposits are opened, but also to see to it as far as is possible that the utilization of petroleum products of all kinds is made more efficient than in the past, so that where waste has formerly been the rule, consumption can be limited to the minimum necessary figure.

## OKLAHOMA NATURAL SALE IS CONFIRMED

OIL CITY, Pa., June 12.—The Oklahoma Natural Gas Co. has been sold to Pope, Richardson & Co., investment bankers and public utility owners, of New York.

The Oklahoma Natural Gas Co. has a capitalization of $14,300,000, comprising 572,000 shares of $25 par value. It has available about 2,000,000,000 feet open flow of natural gas.

The consideration for the property was cash of $6,090,000 and 6 per cent first mortgage 20-year bonds of $12,500,000. This figures per share $10.644 in cash and $21.852 in bonds. In addition to this Pope, Richardson & Co. will pay the Oklahoma Natural Gas Co.'s floating debt of approximately $2,000,000, the Caney River Gas Co. bonds of $100,000, and for the purchase of the Kingwood Pipe Line Co., a separate company operating in connection with the Oklahoma Natural Gas Co., having a very large supply of gas, located near Okmulgee, Okla., $1,000,000. This additional property will be added to the security protecting the first mortgage bonds.

The usual dividend of 50 cents a share payable July 20, to stockholders of record June 30, will be paid. The property is to be turned over to a new Delaware corporation of the same name as of July 1, as soon thereafter as the adjustments can be made.

## COASTAL LUBS DROP WITH SEASONAL SLUMP

HOUSTON, Tex., June 14.—The demand for zero cold test lubs from Gulf Coast crudes is experiencing the usual slump during the warm months and consequently prices have been reduced from one-half to one cent per gallon, car load lots. Quotations on bulk cargoes for export are shaded below those given. Prices on gas oil and fuel oil are unchanged.

The decline is in line with the usual conditions at this time of the year, when the market for these lubs becomes narrow. The great demand is essentially in the winter months, especially in the eastern and northern markets. Plants running both lubricating and gasoline stills have cut down the number of lub stills and increased the gasoline output.

## UNIVERSITY LEASES TO BE PUT ON SALE

AUSTIN, Tex., June 12.—Sale of oil and gas rights on Texas University lands in Crane, Upton, Ector, Andrew, Reagan and other counties soon will be advertised, J. K. Walker, chief clerk of the State Land office, announces.

Preparations for the sale of these rights were begun following refusal of the Supreme Court to grant George W. Thiesen leave to file a petition for mandamus to compel J. T. Robison, land commissioner, to sell the rights for 10 cents an acre and the customary one-eighth royalty.

Thiesen contended the more recent law requiring the land commissioner to sell such rights to the highest bidder after advertising is void, because it does not set the specific time for the sale.

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6-17-26

# Tendencies in Petroleum Refining

## Industry Turning Its Attention to Obtaining Valuable Products From Crude Fractions Now Largely Wasted

By Leopold Singer*, Vienna

It is often said that the petroleum refining industry does not produce individual substances like the dyestuffs industry. The latter has as its raw material coal tar which in certain respects resembles crude oil, but petroleum technologists separate groups which are given collective names and may seem to represent single compounds to the non-chemist, while as a matter of fact they are more or less complex aggregates consisting of a number of individual substances the preparation of which as individuals is never attempted. While benzol or naphthalene is an individual substance of definite fixed properties, gasoline or paraffin is nothing but a general name for a mixture of countless liquid and solid substances composed principally of carbon and hydrogen, but containing also oxygen and sulphur, not only a mixture but a mixture of the most varying composition.

Although it may be said that the preparation in a pure state of the various components which constitute coal tar has been accomplished, the same is true only to a very limited extent for crude oil, which contains the most complex proportions hydrocarbons of a saturated and unsaturated nature with open chains or closed rings and of even more complicated character.

### Not a Chemical Industry Now

The petroleum industry is thus not a chemical industry in spite of its extensive ramifications and great economic importance and in spite of the great sums involved, but is considered rather as an empirical industry which depends too little on the scientific knowledge of the organic chemical industry and too much on rule of thumb knowledge. It is often pointed out that the separation or fractionation of the groups depends on distillation with a more or less extensive limitation of the fractions and that this procedure as well as the treatment with chemicals (sulphuric acid and caustic soda) are only refining processes and cannot be compared with the highly developed scientific principles which guide the other chemical industries.

The uses of the products of the petroleum industry correspond to these peculiarities. So long as it was the purpose of oil refining to obtain as much illuminating oil as possible, the efforts of oil technologists were devoted to the production of just this group and to impart such properties to this fraction as would make it most valuable as an illuminant. When it became possible to provide illumination better and more comfortably, even if not more cheaply, by other means, the production of power fuels became the principal object of oil refining: Gasoline for explosion engines, heavy oils for Diesel motors and fuel oils for oil firing on locomotives, marine engines and industrial plants. In addition the developments of incandescent illumination made not the illuminating value, but the heating value of the liquid fuel of primary importance in its use.

Thus, in general, right up to recent times the production of individual compounds from crude oils was not only attempted, but ways and means to produce them were not available.

In nature one single compound was technically produced—in certain cases practically pure: Namely, natural gas which was sometimes nearly pure methane, $CH_4$. Although chiefly used as an illuminant or as fuel, it was the first petroleum product to receive true chemical treatment. This was its chlorination to produce chiefly methyl chloride, chloroform and carbon tetrachloride which can also be produced by other means and have important industrial uses.

*From Chemische Unschau.

### EVOLUTION OF REFINING

While up to the most recent years the problem of producing more power and combustion fuels from crude oil was the dominant factor in refining, the idea is gradually finding root that petroleum is a natural resource, the conversion of which by the aid of the organic chemical industry into well defined individual substances and by treatment of the latter into new compounds is desirable, although one of the most difficult of chemical problems, and that its use for power and heat production by combustion is basically an unjustifiable, frivolous sin.

Not only by increasing the efficiency of the recovery and use of petroleum is the problem to be solved, but also by conversion into refined products of higher market value and the substitution for those hitherto used of suitable means adapted to the production of heat and power not requiring a natural product like petroleum which may be exhausted in a limited time or which at least cannot be produced in quantities sufficient to meet the increasing demand.

Dominated by an old conservative viewpoint partially caused by the equipment in general use, the technology of petroleum has been used to consider the less reactive paraffin hydrocarbons as the most desirable products of refining, and the more reactive unsaturated hydrocarbons of all kinds such as are found in the gaseous, liquid and solid products and partly in the by-products as undesirable components which must be removed. The removal of these components was and still is called "refining" in Europe. The American use of "refining" for distillation and "treating" for the subsequent procedure is much the better.

### Importance of Natural Gasoline

A further impetus to orientate petroleum technology along true chemical channels resulted from the rise of the natural gas gasoline industry which, although only about 15 years old, has played for a considerable time an increasingly important role due to the demand for gasoline and the enormous development of the automobile, especially in the United States. In principle, this industry is based on subjecting the natural gases, both those which accompany the crude oil and those emanating from petroliferous strata, to processes which remove from these gases the accompanying condensible fractions. There is thus obtained depending on the temperatures employed the higher members especially of the paraffin series, following directly after methane, namely, ethane, propane, butane, hexane, heptane, etc., and where isomers are possible varying quantities of these such as butane and isobutane. At the same time the volatile hydrocarbons of the next unsaturated series are obtained in small quantities. Here we no longer have the pretext, formerly used for not penetrating into the forest of hydrocarbons, of an "inextricable tangle" of hydrocarbons but a mixture consisting of at most a half dozen compounds which can be separated by the usual methods (principally fractional condensation and fractional distillation) into pure substances.

Even if the whole mixture is converted by means of compression, cooling, oil washing or absorption by active carbon into a liquid which is designated for short as gasoline and used for power and heat production, nevertheless we have here a raw material suitable for chemical reactions leading to the production of individual substances. In this sense we have already the conditions for industrial accomplishment.

### Art of Cracking

The remarkable increase in gasoline requirements compelled—leaving aside the search for substitutes—the petroleum technologist to look for ways and means to increase the gasoline yield from a given crude oil. Long before this need arose the observation had been made that under certain conditions heavy liquid and even solid hydrocarbons can be decomposed, broken down or cracked and thus we came to the rise of the cracking distillation which plays a dominant role in gasoline production, especially in the United States. The oils used for cracking are the middle oils (gas oils) distilling over after the kerosene or the heavy residues and in some cases the crude oil itself after it is freed from its low boiling constituents by topping. In this way liquid hydrocarbons are obtained of the unsaturated series which are suitable after purification for blending together with natural gas gasoline with the gasoline obtained direct from the crude. This industry is so developed in the United States that the gasoline production from crude oil could be increased by 35 per cent by these processes at the beginning of this year.

In the cracking process we have as the extreme decomposition products coke as the solid component and cracking gases as the gaseous component. As every distillation depending on the procedure, purpose and equipment, is accompanied by greater or smaller decomposition which is reduced to its lowest limits only in high vacuum distillation, we obtain also in ordinary distillation, distillate gases high in unsaturated compounds. It has been found here that especially the ethylene hydrocarbons are suitable raw materials for the preparation of chemical individuals and this fact has been taken advantage of in industry. By absorbing propylene, $C_3H_6$, in sulphuric acid and converting it to propyl alcohol (isopropyl alcohol) we can obtain aldehydes, ketones and acids by the well known reactions of organic chemistry.

In another direction extensive researches have recently been conducted on the conditions for the oxidation of methane to formaldehyde; there is no doubt that the results obtained will improve with industrial technology.

Together with the halogenation methods which frequently provide an indirect means of obtaining the results achieved by direct oxidation, there are also the sulphonation methods and above all the hydrogenation methods which are attracting attention. The hydrogenation methods have received the attention of the sensational press which has prematurely named this careful, tedious but still incomplete research as a process for the liquefaction of coal. As a matter of fact the immediate possibilities relate chiefly to petroleum refining and include the possibility of converting the heavier fractions of petroleum to lighter ones by the process of hydrogenation. Naturally these lighter components can be separated into chemically individual substances more easily than can the heavy raw materials.

### Oxidation to Fatty Acids

A problem which attracted much attention during the war was the oxidation of hydrocarbons to fatty acids as a substitute for stearin, etc., for industrial and food purposes. As a matter of fact it was possible to obtain the products desired using paraffin as raw material and it was also possible to determine the nature of the individual fatty acids in the reaction mixture, but all attempts to render the numerous patented processes economically feasible have hitherto failed. This, however, does not preclude ultimate success in this direction.

In these oxidation experiments for which certain crude oils or their fractions are especially suitable, another important factor was to prepare lacquers and varnishes and other equally valuable products and a certain though not too great success has been achieved in this direction. Parallel to these attempts we have had attempts for decades to convert petroleum hydrocarbons into soap-like solids or water soluble products as remarkable technical advantages were prophesied for such products.

A special place is reserved for the ichthyols derived from true petroleums but chiefly those related to the shale oils. They are sulphonated hydrocarbons of importance in medicine prepared from petroleum and sold under various names. In any case they are of complicated composition.

### Making of Dyestuffs

As old as the attempts to convert petroleum hydrocarbons into water soluble compounds and to make solid products is the attempt to make petroleum hydrocarbons the basis of a dyestuffs industry, the sole source of which today is coal tar. This can be accomplished only by way of the preparation of or conversion into aromatic compounds. Attempts to conduct cracking so that extensive amounts of aromatic compounds appeared to extend back for decades and besides the laboratory experiments was at one time carried out industrially in Russia, using Russian crude oil residues (Baku-Massut) as the starting material. During cracking at moderate temperatures, especially under pressure as is the case in most cracking processes now used, the previously mentioned cracked gasolines of an unsaturated nature are obtained; cracking at higher temperatures leads to the formation of aromatic compounds.

The same observation has been made in coal tar production. The distillation of coal at high temperatures to produce illuminating gas and coke as end products yields chiefly aromatic hydrocarbons, while low temperature carbonization, which has been studied with great persistence and intelligence in England and has also been worked industrially, produces a low temperature tar similar to petroleum tar in its properties and is considered as a substitute for the latter in the production of gasoline, kerosene, fuel oils, paraffin, etc. A similar position is occupied by the tars obtained from other carbonaceous materials (peat, lignite, brown-coal, bituminous shales).

### Separating Aromatic Hydrocarbons

Certain crude oils already have an especially high content of aromatic hydrocarbons which seems to render the separation of these compounds economically feasible. These are especially crude oils from the Dutch Indies but also from Ru-

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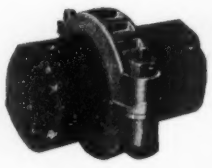

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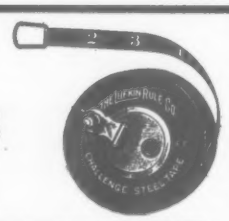

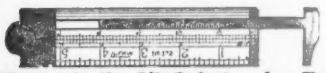

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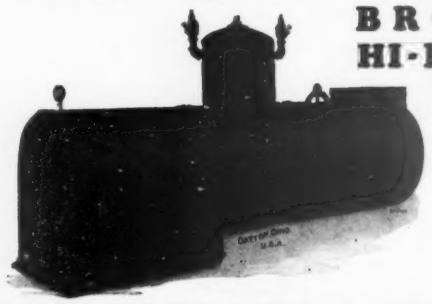

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## PANHANDLE PRODUCTION BY WELLS AND COMPANIES

The daily average production of the Texas Panhandle, by companies, for the week ending June 3, follows:

**Hutchinson County**

| Company— | Wells | Daily Average | Wat. Pct. |
|---|---|---|---|
| Amerada Petroleum Corp.. | 2 | 130 | .. |
| American Ref. Co. | 1 | off | .. |
| Badger Oil Co. | 1 | 73 | 1 |
| Barnum | 1 | off | .. |
| Canadian River Oil Co. | 2 | 155 | 1 |
| Canyon Oil & Gas Co. | 2 | 5,825 | 2 |
| Centerfield Oil Co. | 1 | off | .. |
| Cockrell-McIlroy | 2 | 50 | .. |
| Coble-Whittenburg | 1 | off | .. |
| Currie & Phillips | 1 | 900 | 2 |
| Devonian Oil Co. | 1 | 60 | 5 |
| Dixon Creek Oil Co. | 4 | 5,535 | .. |
| Dunnigan | 1 | 322 | .. |
| Empire Gas & Fuel Co. | 1 | off | .. |
| Fly-Blackburn Oil Co. | 1 | 40 | .. |
| Gates Oil Co. | 4 | 407 | .. |
| Gibson & McMillan | 1 | 100 | 10 |
| Golding & Phillips | 1 | off | .. |
| Gulf Prod. & Panhandle | 9 | 2,378 | .. |
| Gulf Prod. Co. | 3 | 600 | .. |
| Herring & McIlroy | 2 | 305 | 2 |
| Heywood | 1 | off | .. |
| Holmes | 1 | 530 | .. |
| Lennix & Pattison | 1 | 1,800 | 5 |
| Lucky 10 Oil Co. | 1 | 250 | 6 |
| Marland Oil Co. | 1 | off | .. |
| McIlroy | 3 | 578 | .. |
| McMan Oil & Gas Co. | 2 | 510 | .. |
| Middleton | 1 | 37 | .. |
| Newby | 1 | off | .. |
| New Domain Oil Co. | 2 | 37 | .. |
| Phillips-Blasdell | 1 | 59 | .. |
| Phillips-Coble | 2 | 2,043 | .. |
| Phillips-Gibson | 4 | 1,050 | .. |
| Phillips-Parks | 1 | 1,043 | .. |
| Phillips-Pulaski | 5 | 588 | .. |
| Phillips-Williams | 1 | 396 | .. |
| Phillips-Whittenburg | 1 | 64 | .. |
| Prairie Oil & Gas | 3 | 80 | .. |
| Roxana Pet. Corp. | 3 | 3,273 | 1 |
| Ryan Consolidated | 1 | 425 | .. |
| Skelly Oil Co. | 3 | 319 | .. |
| Skiatex Oil Co. | 2 | 600 | .. |
| Smith-Bynum | 1 | 720 | 30 |
| Spring Creek Oil Co. | 1 | 300 | .. |
| J. L. Smith | 1 | 70 | .. |
| Summitt Oil Co. | 1 | 330 | .. |
| Travelers Oil Co. | 1 | 105 | 3 |
| Sunny Jim Oil Co. | 3 | 550 | 35 |
| Ward | 1 | off | .. |
| Westex Oil Co. | 2 | 1,035 | .. |
| White Eagle O. & R. Co. | 4 | 2,010 | .. |
| Whittington | 1 | 65 | .. |
| Total | 97 | 35,747 | .. |
| Daily Average per well | | 386 | .. |

**Carson County**

| | | | |
|---|---|---|---|
| Amarillo Oil Co. | 1 | 35 | .. |
| American Ref. Co. | 4 | 655 | .. |
| Gates Oil Co. | 1 | 13 | .. |
| Gulf Prod. Co. | 8 | 177 | .. |
| Marland Oil Co. | 6 | 1,102 | .. |
| W. W. Silk | 2 | 79 | .. |
| Skelly Oil Co. | 2 | 58 | .. |
| Sunny Jim Oil Co. | 2 | 60 | .. |
| The Texas Company | 8 | 176 | .. |
| Total | 34 | 2,355 | .. |
| Average per well | | 69 | .. |

**Gray County**

| | | | |
|---|---|---|---|
| Empire Gas & Fuel Co. | 1 | 8 | .. |
| Clark | 1 | 6 | .. |
| The Texas Company | 2 | 26 | .. |
| Wilcox-Pampa Oil Co. | 3 | 468 | .. |
| Total | 7 | 508 | .. |
| Average per well | | 73 | .. |

**Wheeler County**

| | | | |
|---|---|---|---|
| Gibson Oil Co. | 1 | 60 | .. |
| Midwest Exp. Co. | 3 | 16 | .. |
| Texhoma Oil & Ref. Co. | 1 | 6 | .. |
| Upton Gas Co. | 1 | off | .. |
| Total | 6 | 82 | .. |
| Average per well | | 13 | .. |
| Grand ttl. Panhandle | 144 | 38,184 | .. |
| Average per well | | 263 | .. |
| Grand total last week | | 38,084 | .. |
| Grand total 4 weeks ago | 96 | 10,721 | .. |
| Average per well | | 111 | .. |

Note—Of this number 11 wells were off production.

## GAS AND GASOLINE TESTS

A. G. W. Biddle and R. W. Drake of Tulsa have opened an engineering office in the Atco building. Mr. Biddle for several years was in charge of the office of the gasoline department of The Texas Company. With the new firm he will specialize in chart reading and auditing. Mr. Drake for several years was in charge of the gas department of the Tidal Oil Co. and has had wide experience in gas field work. The concern has the laboratory equipment to carry on all kinds of tests for gas and gasoline.

## PRAIRIE PIPELINE SHIPMENTS

Prairie Pipe Line Co. deliveries and shipments for May were 4,542,260 bbls., a daily average of 146,525 bbls. The shipments for April averaged 144,432 bbls. per day, with a total for the month of 4,332,972 bbls. March shipments averaged 148,001 bbls. with a total for the month of 4,588,038 bbls. In May, 1925, shipments were 4,719,835 bbls., an average of 152,253 bbls. per day.


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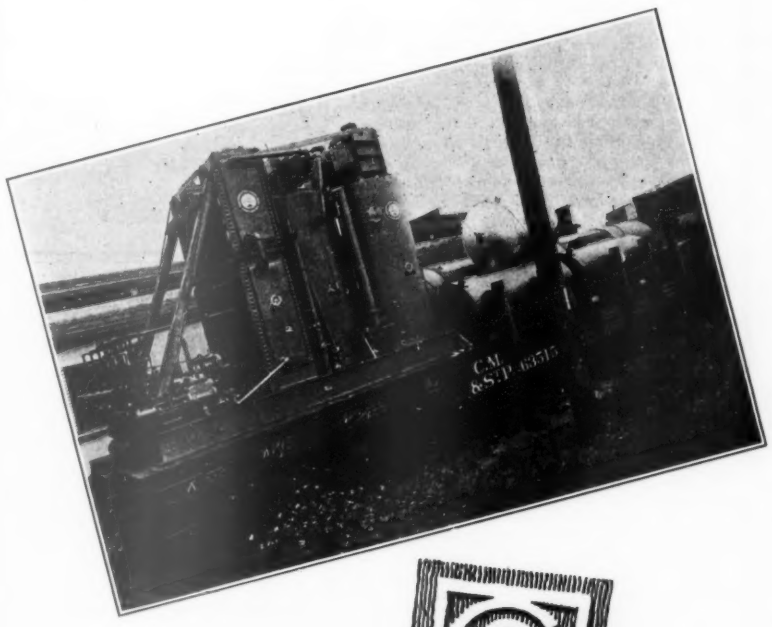

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# Mexican Production Declines; Exports Showing Increase

By Charles E. Kern
*Washington Bureau,*
*The Oil and Gas Journal*

WASHINGTON, D. C., June 12.—Mexican oil production continued to decline during the first three months of 1926 and a continued increase in exportations over those of recent months is shown by the official Mexican statistics, although a comparison with the exports of the corresponding quarter of 1925 shows a decrease from 30,766,399 bbls. in that period to 22,142,932 bbls. during the first quarter of 1926, states a report from Commercial Attache Alexander V. Dye, at Mexico City.

The decline in production, from 33,631,611 bbls. in the first three months of 1925 to 26,465,100 in the corresponding period of 1926, is part of a general decline from 1921, which was the peak year for Mexican oil production.

With the increasing exportation, the proportion of oil taken by the United States and England likewise increased, the former now taking 78.1 per cent and the latter 9.4 per cent. At the same time the combined production and export tax per barrel is also rising slightly.

Drilling during the first quarter of 1926 shows the same tendency which has been prevalent for the past three years, the proportion of wells brought in compared to the total number drilled is decreasing, although the total of drilling increases. Of the 231 wells drilled in these three months, 30 were noncommercial or abandoned for various reasons, 90 were dry holes, 35 salt water wells and 76 producers. The 76 producers had an estimated initial daily production of 345,995 bbls., or an average per well of 4,553 bbls. daily. Of the total of wells drilled, 211 were in the heavy crude region of Mexico and 21 in the light oil section. The light oil well drilling showed a much higher percentage of successes than the heavy crude, having 15 producers in the 21 weeks completed.

The two principal Mexican Federal taxes on petroleum are those on production and on exportation, these being separate from the state and local taxes. The Federal production tax, however, is levied only on oil which is exported, petroleum for domestic consumption being exempt. The production tax is on a sliding scale which depends upon the price of oil quoted in the New York market and is fixed each month. The export tax is fixed. The Mexican Government collected 10,339,525 pesos on the production tax and 3,848,122.92 pesos on the export tax in the first quarter of 1925; in the first quarter of 1926 these collections amounted to 6,461,005.46 pesos and 2,719,880.98 pesos, respectively, showing a total decline of 5,006,759.48 pesos in revenue from this source.

According to a statement given out by the Mexican News Bureau, official returns by the Mexican Government show a total collection of petroleum taxes, both production and export levies, of $3,188,882.28 for the month of April, while for March the amount was $3,717,322.03. While there was a decrease in the amount of oil produced in April, there was an increase in exportations, the exact figures not being available. The returns for May are expected to show an increase, especially in production, as a number of important new wells have been recently brought in. The number of applications for permission to sink new wells shows a constant increase.

When the National Railway Lines were returned to their private owners by the Government in January, 1925, the petroleum development undertaken by the latter was transferred to a separate commission. This body is now undertaking the drilling of new wells in territory outside of the Federal zones to which its operations had been confined, and preparations are being made to increase this activity to a large extent. The wells now in existence produce 500,000 bbls.

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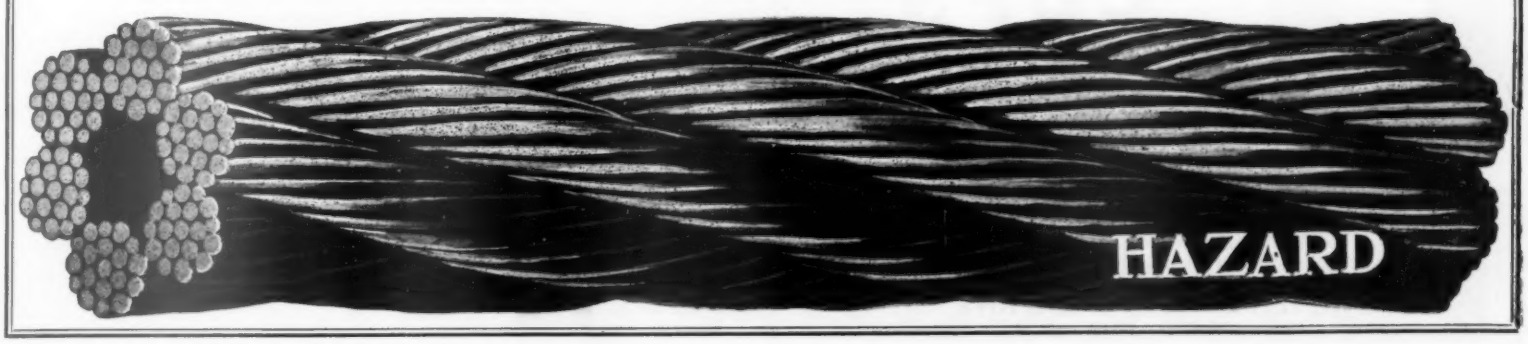

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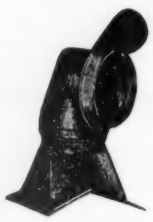

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monthly, a good profit being realized therefrom. The surplus arising therefrom will be devoted to new drilling in districts selected by governmental geologists as promising.

A concern has been granted a concession covering upward of 250 000 acres of the dry bed of the former Lake Texcocoa, in the valley of Mexico, for the purpose of drilling for oil, indications of its presence having been discovered. The concessionaires agree to sink at least one well annually to a minimum depth of 3,250 feet and to conform in all respects to the laws and decrees governing the development of petroleum measures, including a pledge not to appeal for diplomatic interference in case of dissatisfaction.

A project is under consideration for the use of airplanes in locating petroleum deposits, notably in the isthmus region, where prospecting is difficult on account of the dense tropical growth and other natural obstacles.

A change has been made in the method of collecting royalties upon producing wells within the Federal zones. Instead of a flat payment of 30 per cent upon the output there has been established a varying scale according to the amount produced. On a yield of 314½ bbls. daily the royalty is 10 per cent; upon 629 bbls., 15 per cent; on 1,258 bbls., 20 per cent; on 3,416 bbls., 25 per cent; and for a greater amount, 30 per cent

The Government has under examination a plan for materially reducing the cost of kerosene oil for traction and illumination purposes. It will be sought to bring the prices more nearly to the level of those prevailing in the United States. At present the rates are considerably greater, being a decided handicap upon users of tractors in agricultural and industrial enterprises, as well as those obliged to depend upon oil for illumination.

## OIL AND GAS BUREAU STAFF REORGANIZED

OKLAHOMA CITY, Okla., June 12.—A reorganization of the field staff of the oil and gas conservation bureau of the Corporation Commission has been completed by Director William Armstrong. The staff now consists exclusively of men with practical oil field experience, some for 30 years.

The retiring field agent, Miller D. Hay, who has charge of the Muskogee district, resigned to enter the race for chief mine inspector. His successor is S. L. Shores of Muskogee, who for 13 years of his 20 years in the oil business was an operator of cable tools.

Other men appointed during the year are Clyde Dyer of Ardmore, in charge of the Ardmore district; J. A. Kendall of Oklahoma City, in charge of the Ponca City district, and Edward C. King of Cushing, in charge of the Cushing district. The other field agents are Frank Allen of Holdenville, John Benton of Duncan, Eugene Hagan of Tulsa, L. D. Loomey of Nowata, and J. W. Ryan of Okmulgee, each in charge of the district of which his headquarters seat is a part.

## POSTPONE TRANSFER

Final reports by the Interior Department on proposed legislation for the outright transfer of school lands, including the minerals in them, to the states have been deferred until the next session of Congress.

## LEGAL

### SALE OF NAVAJO AND UTE TRIBAL LEASES

On June 23, 1926, at 10 a.m. at Santa Fe, New Mexico, there will be offered for sale at public auction for a cash bonus in addition to royalty on production, exploratory oil and gas mining leases covering four tracts on the Navajo and two on the Ute Mountain Indian Reservation. Twelve other tracts on the Navajo Reservation will also be offered. Full information may be obtained from R. J. Bagerman, Special Commissioner to Negotiate with the Navajo Tribe of Indians, Santa Fe, New Mexico, E. E. McKean, Superintendent Consolidated Ute Agency, Ignacio, Colorado, or the Commissioner of Indian Affairs, Washington, D. C.


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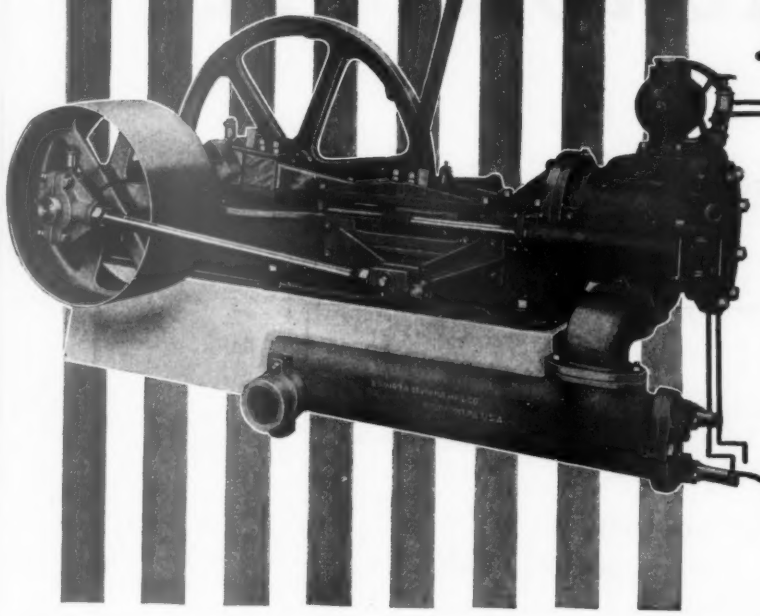

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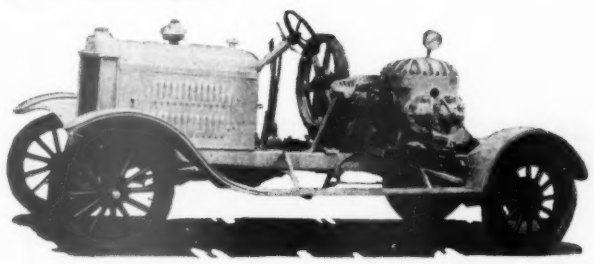

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**To The Oil and Gas Journal:**

**Kindly have mailed to me at Marshalltown, Iowa, last week's and next week's Journal. Have been here a few days and am already lost and out of touch with the oil world.**

**Yours very truly,**
**JOHN L. BAKER.**

That is how readers of The Oil and Gas Journal feel about it. With the approach of the vacation season it is a reminder to have The Oil and Gas Journal follow you so you may keep in touch with the oil world.

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# Detailed Operations in All Fields for Month of May

### SUMMARY OF ALL FIELDS
**Completed Work**

| Field— | Comp. | Prod. | Dry | Gas |
|---|---|---|---|---|
| Eastern | 382 | 2,239 | 38 | 74 |
| Central Ohio | 28 | 595 | 5 | 17 |
| Lima | 43 | 814 | 5 | 0 |
| Indiana | 17 | 203 | 7 | 5 |
| Illinois | 29 | 480 | 9 | 6 |
| Kentucky | 98 | 1,061 | 22 | 2 |
| Tennessee | 1 | 500 | 0 | 0 |
| Georgia | 4 | 0 | 4 | 0 |
| Kansas | 165 | 16,230 | 57 | 4 |
| Oklahoma | 407 | 57,617 | 135 | 39 |
| North Central Texas | 630 | 65,527 | 272 | 9 |
| East Central Texas | 14 | 375 | 10 | 1 |
| Gulf Coast | 102 | 33,291 | 41 | 3 |
| Southwest Texas | 31 | 6,475 | 6 | 7 |
| Arkansas | 133 | 13,707 | 13 | 6 |
| North Louisiana | 104 | 17,569 | 17 | 9 |
| Wyoming | 50 | 4,490 | 7 | 0 |
| Montana | 24 | 5,368 | 2 | 2 |
| Colorado | 10 | 4,480 | 1 | 0 |
| New Mexico | 23 | 955 | 11 | 0 |
| Total May | 2,295 | 231,976 | 662 | 185 |
| Total April | 2,053 | 261,591 | 543 | 188 |
| Difference | 242 | 29,515 | 119 | 3 |

**Summary of New Work**

| Field— | Rigs | Drg. | Ttl. |
|---|---|---|---|
| Eastern | 175 | 439 | 614 |
| Central Ohio | 49 | 67 | 116 |
| Lima | 10 | 62 | 72 |
| Indiana | 5 | 33 | 38 |
| Illinois | 6 | 33 | 39 |
| Kentucky | 9 | 170 | 179 |
| Tennessee | 0 | 17 | 17 |
| Mississippi | 3 | 8 | 11 |
| Alabama | 0 | 4 | 4 |
| Kansas | 90 | 381 | 471 |
| Oklahoma | 248 | 1,227 | 1,475 |
| North Central Texas | 265 | 929 | 1,194 |
| East Central Texas | 2 | 29 | 31 |
| Gulf Coast | 53 | 168 | 221 |
| Southwest Texas | 33 | 102 | 135 |
| Arkansas | 49 | 114 | 163 |
| North Louisiana | 47 | 134 | 181 |
| Wyoming | 35 | 281 | 316 |
| Montana | 15 | 134 | 149 |
| Colorado | 14 | 102 | 116 |
| Utah | 3 | 31 | 34 |
| New Mexico | 14 | 130 | 144 |
| Total May | 1,125 | 4,595 | 5,720 |
| Total April | 1,052 | 4,285 | 5,337 |
| Difference | 73 | 310 | 383 |

Note—In the following report the Section, Township and Range are given first; then the farm, the owner, the serial number of the well and the initial production of the well. The rigs and wells drilling are set forth in similar manner. In lines where the Section, Township and Range are missing the wells are located in the Sections, Townships and Ranges which appear next above in the report.

## OKLAHOMA FIELDS

**Summary of Wells Completed**

| County— | Comp. | Prod. | Dry | Gas |
|---|---|---|---|---|
| Osage | 54 | 3,769 | 15 | 3 |
| Tulsa | 23 | 816 | 11 | 2 |
| Okmulgee | 42 | 822 | 17 | 8 |
| Seminole | 16 | 6,970 | 6 | 1 |
| Okfuskee | 16 | 2,182 | 4 | 2 |
| Hughes | 8 | 2,336 | 2 | 0 |
| Muskogee and Wagoner | 18 | 55 | 11 | 3 |
| Creek | 58 | 6,247 | 14 | 7 |
| Pawnee | 19 | 1,613 | 2 | 0 |
| Kay | 23 | 8,650 | 8 | 4 |
| Payne | 13 | 4,760 | 1 | 2 |
| Lincoln | 23 | 3,669 | 10 | 0 |
| Garfield | 22 | 12,394 | 1 | 1 |
| Stephens & Cotton | 21 | 283 | 14 | 0 |
| Jefferson | 6 | 535 | 0 | 0 |
| Carter | 18 | 2,184 | 6 | 0 |
| Grady | 9 | 117 | 2 | 5 |
| Miscellaneous | 18 | 215 | 11 | 1 |
| Total May | 407 | 57,617 | 135 | 39 |
| Total April | 467 | 105,707 | 132 | 45 |
| Difference | 60 | 48,090 | 3 | 6 |

**Summary of Rigs and Wells Drilling**

| County— | Rigs | Drg. | Ttl. |
|---|---|---|---|
| Osage | 21 | 107 | 128 |
| Tulsa | 4 | 25 | 29 |
| Okmulgee | 18 | 78 | 96 |
| Seminole | 16 | 112 | 128 |
| Okfuskee | 12 | 59 | 71 |
| Hughes | 16 | 54 | 70 |
| Muskogee and Wagoner | 9 | 23 | 32 |
| Creek | 35 | 128 | 163 |
| Pawnee | 15 | 42 | 57 |
| Kay | 15 | 71 | 86 |
| Payne | 2 | 64 | 66 |
| Lincoln | 4 | 56 | 60 |
| Noble | 0 | 25 | 25 |
| Garfield | 28 | 119 | 147 |
| Grant | 1 | 15 | 16 |
| Grady | 9 | 26 | 35 |
| Comanche | 1 | 19 | 20 |
| Stephens and Cotton | 7 | 42 | 49 |
| Jefferson | 3 | 14 | 17 |
| Pontotoc | 2 | 21 | 23 |
| Carter | 15 | 59 | 74 |
| Miscellaneous | 15 | 68 | 83 |
| Total May | 248 | 1,227 | 1,475 |
| Total April | 299 | 1,102 | 1,401 |
| Difference | 51 | 125 | 74 |

### OSAGE COUNTY

15-29-10 Keener O. & G. 8 ..... 50
Keener O. & G. 9 ..... 60
35-29-11 Osage Development Co. 40 ..... 60
36-29-11 A. D. Simon 6 ..... 5
25-27-11 Tuloma Oil 3 ..... 15
1-26-7e Morton et al 1 ..... 20
7-25-8e John L. Bird 1 ..... dry
29-24-8e Earnest McCarthy 1 ..... dry
12-23-8e Continental Oil 1 ..... dry
5-23-9e Continental & Prairie 2 ..... 350
5-22-11 Kewanee O. & G. 12 ..... 25
11-21-9e Moore et al 7 ..... dry
11-21-10 Mid-Kansas Oil 6 ..... 300
4-20-12 Barnsdall Oil 17 ..... dry
20-20-12 Devonian Oil 9 ..... 18
15-29-9e Wah-Sha-She Oil 52 ..... 35
2-27-5e Phillips Pet. 13 ..... 1000
Skelly Oil 8 ..... 220
7-27-11 Owen Osage Oil 362 ..... gas
19-25-11 Harland Oil 82 ..... 5
5-25-12 Arthur Oil 24 ..... dry
13-24-8e The Texas Company 1 ..... 100
24-24-8e Tidal Oil 5 ..... 25
16-22-9e Amerada Pet. 19 ..... 150
7-21-9e Mitchell et al 1 ..... dry
18-21-9e Barnsdall Oil 10 ..... 10
29-20-12 Westland Oil 2-A ..... 10
15-29-10 Keener O. & G. 10 ..... 25
24-29-10 Berlin et al 10 ..... dry
15-29-11 A. W. Brown 10 ..... 15
29-24-9e Continental & Prairie 6 ..... dry
28-24-10 Winona Oil 20 ..... 12
22-21-12 Commercial Drlg. Co. 1 ..... dry
31-21-12 Gillespie & Grimes 7 ..... 50
14-20-10 Sand Springs Home 1 ..... dry
5-20-11 Pioneer Pet. 6 ..... dry
32-29-11 Noble O. & G. 1 ..... dry
12-27-5e Phillips Pet. 2 ..... 120
Phillips Pet. 4 ..... 200
7-27-6e Phillips Pet. 5 ..... 200
Phillips Pet. 9 ..... 117
21-26-6e Lewis Oil 1 ..... 390
32-26-12 Skelton & Moore 9 ..... 40
16-24-8e McCune, Wormser et al 7 ..... 8
16-23-10 Mid-Continent Pet. 1 ..... dry
4-22-11 Kewanee Oil 3 ..... dry
2-21-8e Simmons et al 2 ..... 25
11-21-10 Okla. Natural Gas 711 ..... gas
7-21-11 Titus & Norris 4 ..... dry
15-21-12 Titus & Norris 6 ..... 10
19-21-12 Kewanee O. & G. 9 ..... 6
23-20-10 Sand Springs Home 92 ..... gas
3-20-11 Grimes & Elliott 1 ..... 3
16-21-12 Commercial Drlg. Co. 8 ..... 40
Wells completed ..... 54
Production ..... 3769
Dry ..... 15
Gas ..... 3
Gas production ..... 8,750,000

### TULSA COUNTY

23-19-10 Unallotted, Holmes et al 1 ..... 417
34-19-12 Mackey, Suppees et al 2-K ..... dry
8-17-14 Hodge, Pataula Pet. 1 ..... dry
4-16-13 Russell, Selby O. & G. 8 ..... 3
Buck, Petroleum Co. 13 ..... 1
28-19-11 Fulsom, P. W. Fusselman 1 ..... dry
22-18-12 Brown, Leathers et al 1 ..... 5
25-18-14 Island, Ellen Oil 1-A ..... 15
27-17-14 Clinton, Sparks et al 1 ..... dry
35-22-12 Waldon, Prairie O. & G. 4 ..... gas
4-16-13 Payne, Prairie O. & G. 4 ..... dry
23-19-10 Robinson, Holmes et al 1 ..... 30
22-19-11 Baughman, Holmes et al 2 ..... dry
36-19-11 Wicey, Regal Oil 7 ..... 35
16-18-13 Rentie, B. S. & B. Oil 17 ..... dry
24-17-12 Tingle, Craig et al 2 ..... dry
23-19-10 Timothy, Holmes et al 2 ..... gas
30-19-12 Brown, Underwood et al 4 ..... dry
31-19-12 Kiefer, Sunray Oil 1-A ..... 35
33-18-13 Brister, A. C. Woody et al 1-A ..... 10
5-17-13 Porter, Ed Brady 1 ..... dry
36-17-13 Montgomery, Newbrough & Hagen 1 ..... dry
13-16-13 Techorna, W. C. Cates & Bros. 1 ..... 265
Wells completed ..... 23
Production ..... 816
Dry ..... 11
Gas ..... 2
Gas production ..... 7,500,000

### OKMULGEE COUNTY

22-13-11 Hickman, J. C. Smith 7 ..... gas
29-13-11 Brown, J. H. Rebold 1 ..... gas
4-12-12 Tiger, Vierson et al 1 ..... dry
18-12-12 Kanard, Carter Oil 2 ..... dry
18-15-13 Doyle, Page Bros. et al 1 ..... dry
32-14-13 Gibson, J. H. Gardner 2 ..... dry
16-14-14 Colbert, F. D. Misener 15 ..... dry
34-16-13 Anderson, Hutchinson & Speary 2 ..... 12
16-16-14 Ashbury, Burk Gibbs 1 ..... dry
35-15-12 Cornelius, Darby Pet. et al 2 ..... dry
14-14-12 Denson, Gray Oil 1-A ..... dry
25-14-12 Burton, W. B. Pine et al 2 ..... 150
23-13-11 Thomas, Denver P. & R. 6 ..... gas
8-13-12 Morton, H. C. Marcey 5 ..... 12
17-15-13 Lorriney, Kirkland & Sons 3 ..... dry
10-15-14 Sells, W. B. Pine 1 ..... 50
15-13-14 Doyle, Simms Oil 13 ..... 250
34-15-12 Nubbie, J. J. Deaner 1 ..... gas
25-14-12 Kanard, Hazlett & Campbell et al 1 ..... gas
35-14-13 Checote, F. R. Smith 1 ..... dry
11-14-14 Rentie, Papoose Oil 8 ..... dry
13-14-14 Rentie, Elm Oil 9 ..... 25
16-14-14 Colbert, F. D. Misener, 16 ..... dry
5-14-15 Anderson, Cossellmos Bros. 2 ..... 5
15-13-14 Doyle, Simms Oil 14 ..... 20
34-16-13 Anderson, Hutchinson & Speary 3 ..... 10
29-16-14 Tecumseh, Anglo-Tex & Wangerine 1 ..... dry
19-15-12 Sneider, O. R. Slater 1-A ..... 15
22-15-12 Kimble, Noble O. & G. 1 ..... dry
35-15-12 Clanch, W. E. Hammond 1 ..... gas
23-14-11 Crossland, W. L. Sherry & Carter Oil 1-A ..... 45
21-14-12 Arbitt, Kingwood Oil 2 ..... dry
5-11-12 Hawkins, C. O. Buckles 3 ..... 3
7-11-12 Hawkins, M. C. French et al 3 ..... 55
7-15-13 Fields, Devonian Oil 8 ..... 75
4-15-14 Beams, Future Dev. Co. 1 ..... gas
21-15-14 Garnett, The Texas Co. 11 ..... 50
1-14-14 Harris, Arksarben Oil 10 ..... 10
16-14-14 Lowe, John Aggas et al ..... 35
6-14-15 Barnett, Brother Oil 4 ..... dry
9-13-15 King, W. R. Sommerville 1 ..... dry
13-11-13 Canard, B. Morgan 3 ..... gas
Wells completed ..... 42
Production ..... 822
Dry ..... 17
Gas ..... 8
Gas production ..... 52,500,000

### SEMINOLE COUNTY

5-7n-8e Simon, Independent & Atlantic 1 ..... 1850
Harjo, Magnolia Pet. 5 ..... 2150
6-7n-8e Knight "A", Dixie Oil 1 ..... dry
28-11-8e Williams, Continental Oil 3 ..... 170
7-9n 8e Jefferson, Plover Drlg. Co. 2 ..... 103
18-9n-8e Wilmott, Mid-Cont. Pet. 1 ..... gas
30-8n-8e Douglas, W. R. Ramsey 1 ..... dry
31-8n 8e Amos, W. R. Ramsey 1 ..... dry
8-9n-8e Bethel, Twin State Oil 2 ..... 85
18-9n-8e Jefferson, Shaffer O. & R. 3 ..... 75
14-8n-7e Carolina, Magnolia Pet. 4 ..... 167
6-7n-8e Hawkins, Magnolia Pet. 1 ..... 109
Carolina, Homaokla Oil 1 ..... 2361
Knight, Dixie Oil 2 ..... dry
Knight, Dixie Oil 4 ..... dry
Hawkins, P. & R. Corp. 1 ..... dry
Wells completed ..... 16
Production ..... 6970
Dry ..... 6
Gas ..... 1
Gas Production ..... 4,000,000

### OKFUSKEE COUNTY

35-11-9e Alexander, Prairie O. & G. 1 ..... gas
14-13-9e Calahan, Darby Pet. 1-A ..... 30
3-11-11 Fields, Barbara Oil 2 ..... 5
35-11-9e Wind, Gilcrease Oil 1 ..... 207
30-11-10 Grayson, Empire G. & F. 1 ..... gas
22-11-11 Grayson, Champlin O. & R. 6 ..... 150
3-12-11 Morgan, Barnsdall Oil 2 ..... 450
13-12-11 Harjo, Amerada Pet. 14 ..... dry
33-12-11 McCoy, Josey Oil 10 ..... 250
McCoy, Josey Oil 12 ..... 300
22-11-11 Holmes, Champlin O. & R. 5 ..... 150
21-13-10 Coon, Johnson, Ashe & Atlantic 1 ..... dry
3-12-11 Morgan, C. L. McMahon 1 ..... 480
16-12-11 Thomas, Champlin O. & R. 1 ..... dry
22-12-11 Barnett, Hartman & Mann 7 ..... dry
32-12-11 Fields, Josey Oil 2-A ..... 160
Wells completed ..... 16
Production ..... 2182
Dry ..... 4
Gas ..... 2
Gas production ..... 44,000,000

### HUGHES COUNTY

19-8n-10 Pickens, W. R. Ramsey 2 ..... 25
5-7n-8e Garner, Dixie Oil 1 ..... 2181
1-9n-9e Cain Barnsdall Oil 1 ..... 15
27-9n-9e Long, Phillips Pet. 1 ..... 70
Long, Phillips Pet. 3 ..... dry
18-8n-10 Morrison, Independent O. & G. 2 ..... 15
2-9n-9e Alexander, Independent O. & G. 2 ..... dry
3-9n-9e Alexander, Mid-Cont. Pet. 9 ..... 30
Wells completed ..... 8
Production ..... 2336
Dry ..... 2

### BUSKOGEE AND WAGONER COUNTIES

10-18-16 Kelly, Talbott Bros. 2 ..... gas
2-17-16 McIntosh, Knox & Shouse 1 ..... dry
11-17-16 Mosey, A. E. Carder 1 ..... dry
25-17-16 McIntosh, Severeda Oil 3 ..... gas
32-16-15 McDaniel, Rogers et al 1-A ..... dry
27-14-16 Cherry, O. T. Gilbertson 2 ..... dry
29-18-16 Hawkins, D. T. Marr 2 ..... 25
30-14-19 Harris, E. M. Johnson 2 ..... dry
15-19-15 Sier, Mays Bros. 1-A ..... 5
36-16-17 Brown, Hale Ford Oil 3 ..... dry
21-14-17 Dean, J. L. Slusher 1 ..... dry
21-18-16 Tiger, Eastern Okla. Prod. 6 ..... dry
29-18-16 Scales, Iron Mtn. Oil 2 ..... dry
Princo, D. T. Marr 2 ..... dry
23-17-15 Bird, Gennessee Oil 1-A ..... 10
25-17-16 Tinker, Larsarskey et al 2 ..... 15
31-17-17 Harris, Mitchell Oil 1 ..... dry
36-16-17 Brown, Barton et al 1 ..... gas
Wells completed ..... 18
Production ..... 55
Dry ..... 11
Gas ..... 3
Gas production ..... 19,000,000

### CREEK COUNTY

11-14-8e Henderson, Prairie O. & G. 3 ..... 45
22-17-7e Fife, Tidal Oil 6 ..... 87
14-17-8e Freeman, Alvard & West 2 ..... 50
19-17-8e Cubbie, Transcontinental Oil 1 ..... 60
26-17-8e Cobb, Barnsdall Oil 2 ..... 300
27-17-8e Alec, Barnsdall Oil 5 ..... 75
12-14-8e Bruner, C. G. Tibbens 8 ..... 60
12-14-8e Ponds, Haskell Oil 4 ..... dry
Bruner, The Texas Co. 4 ..... 25
30-18-9e Gates, H. U. Bartlett 1 ..... dry
2-18-11 Sherill, Sheridan Oil 2 ..... 30
4-18-12 Hawkins, Devonian Oil 1 ..... 750
26-17-10 Bucktrot, H. C. Wilson 1 ..... gas
8-17-11 Freeman, Ireland et al 6 ..... 15
13-17-11 McIntosh, A. Shelton 1-A ..... dry
28-17-11 Barnett, Transcontinental Oil 3 ..... 10
17-16-11 Morgan, Crandell, Marta & fer 1-A ..... dry
29-14-10 Walker, Twin State Oil 1 ..... 33
13-19-8e Weaver, The Texas Co. 1 ..... 25
12-17-8e Bishop, Aztec Oil 1 ..... dry
27-17-8e Bigpond, Inter-Ocean & J. W. McCullough 2 ..... 1040
Bruner, Southwestern Pet. 1 ..... 615
25-15-7e Charles, Phillips Pet. 2 ..... gas
12-14-8e McKan, Skelly Oil 13 ..... 75
30-19-9e Boyd, Kingwood Oil 1 ..... dry
36-18-9e Richard, Madden & Madden 1 ..... 30
23-17-19 Holden, J. H. Wright 3 ..... 190
8-17-11 Freeman, Ireland et al 5 ..... 360
30-15-9e Unallotted, C. G. Tibbens 24 ..... 550
1-18-7e Jack, Sapulpa Refg. 2 ..... 75
5-18-7e Rector, Riverside O. & R. 1 ..... 80
Atkins, Gem Oil 24 ..... 130
27-17-8e Bruner, Jomack Oil 2 ..... 300
26-15-8e Starr, Bu-Vi-Bar Pet. 2 ..... 10
1-18-9e Elliott, Kilgore et al 1 ..... dry
1-18-11 McGuire, Gypsy Oil 1-A ..... 75
30-16-11 Ricks, Sheridan Oil 1 ..... dry
29-14-10 Walker, The Texas Co. 1 ..... 10
35-18-8e Big Pond, Lima O. & G. 1-A ..... gas
30-14-10 Walker, Prairie O. & G. 1 ..... dry
13-19-8e Ruth, Gled Oil 3 ..... gas
14-17-8e Fry, Alvard & West 4 ..... 30
35-17-8e Marshall, Gypsy Oil 1 ..... dry
5-16-8e Emarthla, Magnolia Pet. 4 ..... dry
25-15-7e Charles, Phillips Pet. 2 ..... gas
2-14-8e Davy, Henry & Whitehill 1 ..... 112
Ponds, Gypsy Oil 7 ..... 60
14-14-8e Durant, C. G. Tibbens 1-A ..... dry
3-18-11 Leader, Gray Oil 1 ..... 80
6-18-12 Sango, Sunray Oil et al 4 ..... 530
Gray, Gypsy Oil 20 ..... 80
36-17-9e Bright, D. B. Mason et al 2 ..... gas
11-17-10 Taconey, Commercial Cent. Oil 1 ..... gas
24-17-10 Tahkaney, J. H. Wright 7 ..... 45
Strip, Brooker & Warren 1-A ..... 150
25-16-11 Lynde, Henry & Amerada et al 1 ..... dry
30-15-9e Unallotted, C. G. Tibbens 25 ..... 75
31-15-9e Lucas, C. G. Tibbens 2 ..... dry
Wells completed ..... 58
Production ..... 6247
Dry ..... 14
Gas ..... 7
Gas production ..... 81,500,000

### PAWNEE COUNTY

10-20-8e McNeal, Prairie O. & G. 8 ..... 18
33-23-8e Miller, Watchorn O. & G. 14 ..... 50
4-22-3e Miller, Magnolia Pet. 9 ..... 57
33-23-3e Brown, Watchorn O. & G. 1 ..... dry
31-22-7e Canfield, Bu-Vi-Bar Pet. 1 ..... dry
22-20-6e Smith, Westerly Oil 5 ..... 58
24-20-8e Wasson, Southwestern Oil Fields Corp. 19 ..... 15
13-21-7e McIntyre, Minnehoma Oil 1 ..... 175
33-20-5e School land, Marland Oil 1 ..... 762
9-20-6e E. Fugate, Magnolia Pet. 4 ..... 107
36-20-6e Garland, Cortez Oil 1 ..... 30
15-20-6e Burton, Prairie O. & G. 2 ..... 3
35-22-6e Dobson, Devonian Oil 1 ..... 50
21-21-8e ———, Wasson & West 1-A ..... 12
9-20-6e S. M. Fugate, Magnolia Pet. 2 ..... 190
16-20-7e School land, Mid-Cont. Pet. 18 ..... 70
School land, Mid-Cont. Pet. 19 ..... 90
School land, Mid-Cont. Pet. 20 ..... 30
7-20-8e Childers, Minnehoma Oil & Shelts 1 ..... 75
Wells completed ..... 19
Production ..... 1613
Dry ..... 2

### KAY COUNTY

21-29-1w Duncan, Comar Oil 13 ..... 120
17-29-1e Swinson, Harris & Hahn 1 ..... 107
31-28-1w Bebb, D. W. Moore et al 1 ..... dry
8-27-1w Jameson, Harris & Hahn 2 ..... 90
9-27-1w Kumler, Blackwell O. & G. 6 ..... gas
12-26-2w North, Marland Oil 5 ..... 50
16-26-3e School land, Souligny et al 1 ..... dry
15-25-2w Thomas, Marland Oil 7 ..... gas
Thomas, Marland Oil 8 ..... gas
14-25-1e Little Chief, O-Kansas Oil 1 ..... dry
5-28-1w Biddle, Comar Oil 5 ..... 2253
16-27-1w Skelton, Manahan et al 3 ..... dry
12-26-2w Hubbard, Marland Oil 5 ..... 300
32-28-5e Milde, Waite Phillips & Marland 1 ..... dry
16-29-7e School land, Wentz Oil Corp. 1 ..... dry
5-28-1w McCullough, Comar Oil 4 ..... 160
Bechtel, Comar Oil 3 ..... 2467
Lawrence, Comar Oil 2 ..... 3015
16-27-1w Barr, Ostot et al 2 ..... gas
28-29-1w Murphy, Comar Oil 3 ..... 35
33-28-1e Hanz, Carter Oil 1 ..... dry
1-26-2w Hockstater, Marland Oil 1-A ..... 53
15-25-2w Thomas, Marland Oil 6 ..... dry
Wells completed ..... 23
Production ..... 8650
Dry ..... 8
Gas ..... 4
Gas Production ..... 41,000,000

### PAYNE COUNTY

24-19-4e Bolton, Prairie O. & G. 2 ..... 240
Bolton, Prairie O. & G. 3 ..... 1668
13-19-14e Stover, Roxana Pet. 3 ..... 1842
26-18-3e Barth, Deep Rock O. & G. 3 ..... 95
Morehead, Deep Rock O. & G. 1-A ..... 75
30-18-6e Laughlin-Berry, Home Gas 1 ..... dry
6-17-4e Payne, Magnolia Pet. 4 ..... gas
26-18-3e Barth, Deep Rock O. & G. 4 ..... 60
27-18-3e Ethridge, Deep Rock O. & G. 1 ..... 400
24-19-4e Pleasants, Magnolia Pet. 2 ..... 40
26-18-3e Waltman, T. C. M. Oil 1 ..... gas
Waltman, T. C. M. Oil 2 ..... 180
7-18-5e Goss, Twin State Oil 1 ..... 60
Wells completed ..... 13
Production ..... 4760
Dry ..... 1
Gas ..... 2
Gas Production ..... 40,000,000

### LINCOLN COUNTY

20-17-6e Johnson, Hiram C. Wilson 1 ..... dry
36-15-5e Johndahl, Amerada & Marland 1 ..... dry
School land, Mid-Kansas 1 ..... dry
School land, Wentz Oil 1 ..... dry
8-15-6e Earp, Mid-Cont. Pet. 3 ..... 1620
Earp, Mid-Cont. Pet. 4 ..... 1065
10-14-5e Patterson, Phillips Pet. 4 ..... 75
7-15-6e Ford, Skelly Oil 5 ..... 403
2-14-5e Hopkins, Amerada Pet. 4 ..... 120
Hopkins "C", The Texas Co. 2 ..... 60
10-14-5e M. & F. Chapman, Magnolia 1 ..... 112
Nickel, Shaffer O. & R. 4 ..... 80
Nickel, Shaffer O. & R. 5 ..... 30
35-15-5e Caves, Gypsy Oil 7 ..... dry
1-14-5e Keeler, Devonian Oil 1 ..... dry
Keeler, Devonian Oil 2 ..... dry
2-14-5e Bigwater, Twin State Oil 9 ..... 25
4-14-5e Thompson, Magnolia Pet. 5 ..... 14
11-14-5e Caves, Gypsy Oil 13 ..... 105
16-14-5e School land, Magnolia Pet. 1 ..... dry
31-12-6e Bentley, J. W. McCulloch 1 ..... dry
3-14-5e Stout, Prairie O. & G. 20 ..... 25
Belles, Magnolia Pet. 1 ..... dry
Wells completed ..... 23
Production ..... 3669
Dry ..... 10

### GARFIELD COUNTY

12-22-4w Wishard, Prairie O. & G. 11 ..... 225
13-22-4w Walker (North), Sinclair Oil 1 ..... 187
Walker (North), Sinclair Oil 2 ..... 700
Walker (N), Sinclair Oil 32 ..... 427
Walker (N), Sinclair Oil 39 ..... 2580
18-22-3w Schroeder, Roxana Pet. 2-L ..... 802
Schroeder, Roxana Pet. 3-L ..... 5314
Hartley, Sinclair Oil 2 ..... 1362
Hartley, Sinclair Oil 23-A ..... 400
Hartley, Sinclair Oil 28 ..... 1000
21-22-3w Allen, Champlin Refg. 1-A ..... gas
13-22-4w School land, Mid-Cont. Pet. & Marland 40 ..... 1046
24-22-4w Belveal, Healdton Pet. 32 ..... dry
18-22-3w Schroeder, Roxana Pet. 6-H ..... 3051
Schroeder, Roxana Pet. 7-H ..... 4323
Hartley, Sinclair Oil 29 ..... 1825
Hartley, Sinclair Oil 32 ..... 4560
13-22-4w Walker (North) Sinclair Oil 40 ..... 1152
25-22-4w Hotson, Empire G. & F. 15 ..... 120
18-22-3w Schroeder, Roxana Pet. 5-L ..... 756
Hartley, Sinclair Oil 7 ..... 1135
Hartley, Sinclair Oil 31 ..... 1435
Wells completed ..... 22
Production ..... 12394
Dry ..... 1
Gas ..... 1
Gas production ..... 1,000,000

### STEPHENS AND COTTON COUNTIES

2-2n-5w Hervey, Carter Oil 1 ..... 13
13-1n-9w School, Pierce & Brown 1 ..... dry
32-1n-5w Charleston, Magnolia Pet. 1 ..... 30

28-1s-8w Voss, Guy Brown 3 ..... 15
22-1s-9w Tis-So-Ya, Magnolia Pet. 1 ... dry
11-2s-11w Revelle, Blair & O'Donahue 1 dry
11-3s-9w Davis, Continental Oil 1 .... dry
33-3s-6w Melton, Burris & Stahl 1 .... dry
6-1n-8w ———, Beasley & Lane 1 .... dry
9-1n-8w Scruggs, E. N. Rust 1 ..... dry
2-1n-5w Payne, Murphy Oil 2 ..... dry
25-1s-9w Church lot, Winkler & McQueen 1 ..... 10
Massey, Gamble et al 1 ..... 15
28-1s-8w Nelson, Winkler & McQueen 1-A ..... 175
32-1s-8w Potts, Inter-Ocean Oil 3 .... dry
21-2s-7w Johnson, Magnolia Pet. 1 .... dry
30-1s-8w Brown, Lone Star-Ft. Ring 8 dry
Brigham, Beard & Cobb 1 ... 25
2-2s-8w Dare, Pace-Texhoma Oil 1 ... dry
Houston, Pace-Texhoma Oil 1-A ..... dry
11-3s-6w Florence, Gibson & Johnson 1 dry

Wells completed ..... 21
Production ..... 283
Dry ..... 14

**JEFFERSON COUNTY**

33-6s-5w Indian, A. C. Brown 4 ..... 60
Jones, Carter Oil 3 ..... 200
Seay, Gypsy Oil 20 ..... 150
Indian, A. C. Brown 2 ..... 30
Seay, Carter Oil 2 ..... 15
Seay, Gypsy Oil 21 ..... 80

Wells completed ..... 6
Production ..... 535

**CARTER COUNTY**

34-1s-3w Snyder, Magnolia Pet. 2 .... 200
31-2s-2w Bennett, Graham Min. Tr. 13 5
9-4s-2w Hazel-Vorhees, Simpson & Fell 3 ..... dry
1-4s-3e Barnes, Humble O. & R. 1 ... dry
3-2s-3w Pruitt, Wirt Franklin 1 ... 140
7-2s-2w Caughman, Roxana Pet. 2 .... 175
28-5s-1e Fish, Amerada Pet. 17 ..... dry
33-1s-3w Bumpass, Magnolia Pet. 1 .... 337
15-2s-3w Carpenter, Mid-Cont. Pet. 2 .. 145
23-2s-3w Lohman, Magnolia Pet. 7 .... dry
27-2s-2w Noble, F. W. Merrick et al 2 dry
8-3s-2w Nicholson, Merrick-Cameron 1 247
20-5s-1e Farve, Amerada Pet. 26 ..... 40
34-1s-3w McClish, Gypsy Oil 1 ..... 515
3-2s-3w Pruitt, Wirt Franklin & Prairie 2 ..... 250
22-2s-3w Carpenter, Wirt Franklin 5 .. 75
Cox, Magnolia Pet. 1 ..... 55
8-5s-1w Lesher, Pandem Oil 1 ..... dry

Wells completed ..... 18
Production ..... 2184
Dry ..... 6

**GRADY COUNTY**

35-3n-5w Lindsey, Carter Oil 3 ..... 100
34-5n-8w Scott, Carter Oil 1 ..... dry
35-5n-8w Duke, Magnolia Pet. 2 ..... gas
11-4n-8w Moss, Hall & Briscoe 2 ..... gas
3-4n-8w Dryden, Prairie O. & G. 1 ... dry
35-3n-5w Abernathy, Carter Oil 3 ..... 17
23-5n-8w Edmundson, Skelly Oil 1 .... gas
McCaughtry, Stogner et al 2 gas
2-4n-8w Dryden, Carter Oil 3 ..... gas

Wells completed ..... 9
Production ..... 117
Dry ..... 2
Gas ..... 5
Gas production ..... 154,000,000

**MISCELLANEOUS COUNTIES**

**Caddo County—**
31-6n-9w Abernathy, English Drlg. Co. 3 60
6-5n-9w Culp, Briscoe & Hall 5 ..... 50
**Pontotoc County—**
1-3n-6e Greenwood, Lloyd & Smith 1 dry
17-4n-6e Phillips, Bryan et al 1 ..... gas
**Garvin County—**
17-1n-3w Deryden, The Texas Co. 12 ... 65
5-1n-1e Christener, L. D. Jones 1 ..... dry
16-1n-3w Harris, Magnolia Pet. 11 .... 20
**Logan County—**
21-18-2w Donahue, J. L. Donahue et al - dry
**Marshall County—**
24-5s-5e Arbuckle, United Eight Oil 5 dry
**Grant County—**
8-27-8w Moore, Register Oil 1 ..... dry
**Comanche County—**
3-3n-10w Hallum, Becker et al 3 ..... 8
30-2n-9w Price, Magnolia Pet. 3 ..... dry
23-2n-10w Weaver, Stanforth & Mater 1-A ..... dry
6-2n-9w Austin, Harry Hanbury 1 ..... dry
**Alfalfa County—**
8-28-12w Smith, W. J. Hartley & C. W. Green 1 ..... dry
**Noble County—**
6-24-2w Stephenson, Marland Oil 1 .. dry
**Rogers County—**
29-24-17 Cochran, S. A. Lane et al 2 .. 12
**Love County—**
12-9s-1e Gray, R. B. Pender et al 1 ... dry

Wells completed ..... 18
Production ..... 215
Dry ..... 11
Gas ..... 1
Gas production ..... 2,000,000

**OSAGE COUNTY**

**Rigs**

2-27-5e Phillips Pet. 2, 3.
12-27-5e Phillips Pet. 8.
34-27-6e Kewanee Oil 1.
11-27-10 Pure Oil 1.
8-27-11 Owen Osage Oil 365.
21-27-12 J. W. Dyson 1.
6-26-5e Jess Moore et al 1.
21-26-6e Phillips Pet. 4.
Lewis Oil 5.
32-26-11 Ohio-Osage Oil 2.
21-25-6e Sinclair Oil 3.
30-25-9e New England O. & P. L. 1.
34-25-11 Devonian Oil 14, 15.
32-24-9e Peters Pet. 1.
9-23-8e Pure Oil 171.
21-23-8e Barnsdall Oil 1.
36-22-8e Mid Kansas O. & G. 2.
4-22-11 Kewanee Oil 13.
30-21-12 Elliott & Smith 24.

**Wells Drilling**

15-29-10 Keener O. & G. 12.
25-29-10 I. T. I. Oil 1.
27-28-6e Laurel O. & G. 1.
31-28-11 C. O. Ross 1.
1-27-5e Phillips Pet. 13, 16.
2-27-5e Phillips Pet. 1, 4.
Skelly Oil 1.
12-27-5e Phillips Pet. 1, 3, 16.
26-27-5e Skelly Oil 6.
7-27-6e Phillips Pet. 1, 2, 3, 4, 13.
Phillips Pet. 4.
17-26-6e Peters Pet. 4.
1-27-7e Tidal Osage Oil 2.
36-27-11 Tyrone Oil 7.
9-26-6e Carter Oil 9.
16-26-6 Carter Oil 17.
20-26-6e Carter Oil 10.
Phillips Pet. 15, 16.
21-26-6e Phillips Pet. 13, 14, 15, 16.
Lewis Oil 2, 3, 4.
22-26-6e Mid Kansas Oil 1, 2, 3, 4.
31-26-8e New England O. & P. L. 1.
11-25-3e Comar Oil 1.
35-25-5e Gypsy Oil 1.
21-25-6e Sinclair Oil 1.
28-25-6e I. T. I. Oil 1.
Phillips Pet. 3.
19-25-8e A. G. Oliphant 1.
29-25-8e Lewis Oil 9.
30-25-8e Lewis Oil 1.
31-25-8e A. G. Oliphant et al 2.
29-25-12 Titus et al 1.
6-24-8e Osage Oil 1.
24-24-8e Tidal Oil 6.
26-24-8e Carter Oil 3.
29-24-8e Continental Oil 5.
20-24-9e Tidal Oil 3.
32-24-9e Peters Pet. 5.
28-24-10 Western American Oil 10.
1-24-11 Plymouth Pet. 1.
1-23-8e Tidal Osage Oil 1.
12-23-8e Peters Pet. 9.
21-23-8e Beacon Oil 25.
8-23-10 Adlum et al 2.
25-23-10 Ross & Wetherill 13.
35-22-8e Skelly-Moore 1.
36-22-8e Mid Kansas Oil 1.
16-22-9e Amerada Pet. 20.
21-22-9e Margay Oil 8.
4-22-10 James Glenn 1.
18-22-10 Mid-Cont. Pet. 15.
23-22-10 Elm Oil 14.
33-22-10 Tidal Osage Oil 25, 26.
28-22-12 Kanupp et al 1.
11-21 7e Gypsy Oil 1.
2-21-8e Skelly Oil & Moore 7.
24-21-9e Devonian Oil 1.
Devonian Oil 1.
10-21-10 Mid Kansas Oil 1, 2.
11-21-10 Mid Kansas Oil 7.
18-21-10 Cohen & Bozo 1.
19-21-10 Swoverland et al 3.
27-21-10 Devonian & Tidal 2.
33-21-10 T. K. Smith 1.
34-21-11 Essley et al 1.
17-21-12 Kewanee O. & G. 5.
31-21-12 Gillespie & Grimes 8.
Grimes & Elliott 9.
2-20-10 New England O. & P. L. 1.
29-20-10 Breene & Holm 1.
3-20-11 Grimes & Elliott 1.
5-20-11 Pioneer Pet. 7.
30-20-11 Sand Springs Home 93.
31-20-11 Sand Springs Home 94.
33-20-11 Sand Springs Home 1.
35-20-11 Echo Oil Co. 1.
22-20-12 Savoy Oil 8.
28-20-12 Continental Oil 15.
29-20-12 Winona Oil 5, 6.
21-26-7e The Prairie O. & G. 6, 7.

**Wells Shut Down**

1-26-9e Ike Johnson 1.
29-25-8e The Texas Co. 1.
28-24-8e Axelrod et al 2.
34-22-9e Moore et al 1.
24-21-8e Warwick Oil 1.
13-20-10 L. C. Warwick 1.
Rigs, 21; wells drilling, 107; total, 128.

**TULSA COUNTY**

**Rigs**

6-17-13 Oswalt, Hilt et al 2-A.
9-17-14 Perryman, H. & N. Oil 2.
4-16-13 Stewart, Kewanee O. & G. 16.
18-16-14 McCoy, Shaffer O. & R. 4.

**Wells Drilling**

23-19-10 Boles, the Prairie O. & G. 1.
4-19-10 Tuckobotche, Gledden Oil 1.
15-19-10 Beaver, Crown Central Pet. 1.
23-19-10 Nevins, Holmes & McMahan 1.
23-19-10 Postoak, Red Bank Oil 1, 2.
Hickory, Twin State Oil 1.
17-19-11 Smith, Hutt & Hutt 6.
35-19-11 Inchoe, A. A. Thornton 1.
29-19-12 Postoak, Gladys Belle Oil 3.
34-19-12 Drew, Suppees et al 1-A.
35-19-12 Narasky, S. E. Benson 8.
9-19-14 Herrod, Thermal Oil 1-A.
11-18-13 Simon, Hall & Hazen 1.
22-17-13 Bruner, Franchott et al 7.
33-17-13 Montgomery, Newbough & Hazen 2.
4-16-13 Buck, Pet. Corp. et al 19.
6-16-13 Cawles, Superior Oil 4.
12-16-13 Cooper, W. O. Dickson 2.

**Wells Shut Down**

4-19-12 Strip, J. C. King 1.
18-18-14 Burgess, Edwards et al 1.
28-18-14 Flippen, T. Green et al 1-A.
3-16-12 Sanderson, S. W. Anthony 2.
13-16-12 Unallotted, Winemiller et al 1.
Rigs, 4; wells drilling, 25; total, 29.

**OKMULGEE COUNTY**

**Rigs**

24-16-12 Tiger, Devonian Oil 2.
4-16-13 Stewart, Kewanee O. & G. 16.
21-16-14 Rowe, Atlas Oil 3.
17-15-11 Gibson, Shaffer O. & R. 8.
9-15-12 Forty-four, Carter Oil et al 2.
18-15-12 Huffstetler, L. C. Wheeler 1-A.
23-15-12 Bummett, Phillips Pet. 2.
35-15-12 Ostran, Barbara Oil 4.
30-14-11 Madigan, R. E. Garrett et al 1.
29-13-11 Chittim, Wigton & Long 2-A.
32-13-11 Thomas, Denver P. & R. 7.
32-11-12 Ashbury, Colorado O. & G. 2.
19-15-13 Phillips, Thompson & Black 1.
31-15-14 Franklin, Sinclair O. & G. and J. G. Catlett 8.
9-14-13 Summer, W. T. Campbell 1.
32-14-13 Checote, Vincent & Sansberry 1.
28-13-15 Hutton, O. T. Stout et al 2.
31-11-13 Han, G. V. Luttes 1.

**Wells Drilling**

20-16-12 Doneghy, Sheldon Oil et al 3.
24-16-12 Tiger, Devonian Oil 6.
27-16-12 Hoskins, Independent O. & G. 12.
19-16-13 Grant, Leonard Pet. 3.
29-16-13 Stanley, J. W. McCullouch 1.
30-16-13 Tiger, J. W. McCullouch 1.
34-16-14 Bruner, Harsha & Delaney 1.
4-15-11 Fife, Sheridan Oil 5.
20-15-11 Gibson, Shaffer O. & R. 1.
29-15-11 Fee, Getzendamer 4.
23-15-12 Bumett, Phillips Pet. 1.
24-15-12 Blair, C. E. Campbell 1-A.
Blair, Ted Savoie 2.
1-14-11 Brown, Penrod & Thompson 1.
5-14-11 McIntosh, J. H. Rebold 1.
7-14-11 Farmer, W. E. Holmes O. & G. 1.
20-14-11 Sizemore, Evans Daw et al 1.
35-14-11 Fisher, Crown Central Pet. 6.
3-14-12 Stake, W. C. Newman et al 1.
4-14-12 Farr, W. T. Campbell 1.
17-14-12 Kimble, Kingwood Oil 1.
22-14-12 Huckaby, Sinclair Oil 1.
Havercamp, T. A. Johnson et al 5, .6
3-13-11 Anderson, Vincent et al 1.
25-13-11 Lewis, J. A. Swindler & Sons 6.
28-13-11 Lewis, The Texas Company 1.
29-13-11 Chittim, Wigton & Long 1-A.
33-13-11 Roberts, Radcliff Oil 1-A.
5-13-12 Baker, Sheldon & Amerada 1.
32-13-12 Unallotted, Amerada Pet. et al 2.
7-12-12 Wilson, Independent O. & G. 4.
Turner, Morton & Co. 3.
31-12-12 Rentie, Simms Oil 15.
32-12-12 Tunnelly, Galligan & Greenwald 1-A.
4-11-12 Hawkins, Droppleman et al 3.
17-11-12 Summers, M. C. French 4.
18-11-12 Fish, F. L. Dunn 1-A.
31-11-12 Barnett, Wireck & King 1.
32-11-12 Ashbury, Colorado O. & G. 1.
33-11-12 Corbray, W. L. Barclay 1.
4-15-13 Althanen, Humble O. & R. 1.
7-15-13 Wisner, Devonian Oil 13.
19-15-13 Long, L. R. Page 1.
3-15-14 Andrews, R. C. Vincent 1.
7-15-14 Brown, E. B. Grubbs 1.
10-15-14 Sells, W. B. Pine 1.
15-15-14 Alexander, Jolly & Ogg 1.
18-15-14 Harrison, Elliott & Vensell 5.
19-15-14 Harrison, A. W. Cline 1.
21-15-14 Osborn, Jolly & Ogg 1-A.
Osborn, J. L. Selby 1-A.
19-14-13 Berryhill, J. W. McCulloch Inc. 9.
27-14-13 Byrd, J. J. Schock et al 1.
13-14-14 Rentie, T. Sander 5.
14-14-14 Colbert, T. B. Slick 1.
15-14-14 Colbert, Mechling & Berlin 1-A.
16-14-14 Colbert, F. D. Misener et al 9.
Colbert, Oklavania Oil 7.
20-13-13 Hargraves, M. P. Evans et al 1.
15-13-14 Doyle, Cal Cul Oil 4.
Doyle, Simms Oil 15.
27-13-14 Hill, Clarion Oil 6.
Hill, A. Shelton 1.
9-13-15 Freeman, E. J. Lambert 5.
1-12-13 Wiley, R. W. Viessen et al 1.
11-12-13 Lewis, W. B. Pine 2.
6-12-14 Griffen, Kingwood Oil 5.
13-11-13 Canard, B. Morgan 4.

**Wells Shut Down**

25-13-11 Tobler, the Prairie O. & G. 2.
20-16-12 Fee, Crider 1.
24-16-14 Lowery, E. J. Lambert 1.
20-15-12 Adams, D. D. Mickelson 6.
14-13-11 Strip, Gibson & Zahniser et al 1.
3-11-12 Calloway, B. Martin et al 1.
18-15-13 Doyle, W. B. Pine 8.
14-14-13 Lovett, E. T. McDowell et al 1.
18-14-15 Rentie, C. Smith 9.
Rigs, 18; wells drilling, 78; Total, 96.

**SEMINOLE COUNTY**

**Rigs**

34-10-6e Grayson, Carter Oil 1.
Grayson, Mid-Cont. Pet. 1.
8-10-8e Deer, Devonian Oil 2.
24-9n-6e Dyer, Amerada Pet. 2.
25-9n-6e Nobles, Empire G & F. 1.
18-9n-8e Peter, Southwestern Pet. 4.
18-9n-8e Smith, Winona Oil 1.
14-8n-7e Rodman, Magnolia Pet. 1.
25-8n-7e Buck, Magnolia Pet. 1.
21-8n-8e Long, "B," Dixie Oil 4, 2.
1-7n-7e Sam, Wood & Hill 1.
6-7n-8e Hawkins, Magnolia Pet. 2.
Dindy, Superior Oil 1.
Knight "C," Dixie Oil 4.
26-10-6e Harjoche, Carter Oil 1.

**Wells Drilling**

14-8n-7e Porter, the Prairie O. & G. 1.
33-10-6e Kinkade, the Prairie O. & G. 1.
28-11-8e Williams, the Prairie O. & G. 1.
28-11-8e Williams, Gypsy Oil 1.
33-11-8e Pierce, Mutual & Continental 4.
34-11-8e Hill, McMann & Magnolia 6.
35-10-6e Harrison, Carter Oil 1.
4-10-8e Yarbow, Sinclair Oil 9.
5-10-8e Williams, Gypsy Oil 3.
Sampson, Gypsy Oil 5.
10-9n-5e Brown, The Texas Company 1.
Johnson, Magnolia Pet. 1.
Lena, Magnolia Pet. 1.
Ingram, Independent O. & G. 1.
Ingram, Barnsdall Oil 1.
10-9n-6e Noble, Superior Oil 1.
15-9n-6e Johnson, Gypsy Oil 1.
Noble, Tidal-Osage Oil 1.
24-9n-6e Carter, Gypsy Oil 1.
Dyer, I. T. I. Oil 2, 8.
Carter, I. T. I. Oil 1, 2, 8.
Carter, Carter Oil 1.
Dyer, Amerada Pet. 1.
Pahardy, Tidal Osage Oil 1, 2.
Pahardy, Mid-Cont. Pet. 1.
28-9n-6e Carter, Barnsdall Oil 1, 2.
26-9n-6e Fixico, Independent & Tidal Osage Oil 1.
35-9n-6e Cudjo, Carter Oil 1.
15-9n-7e Jonah, Pure Oil 1.
17-9n-7e W. Bull, Sinclair Oil 1.
18-9n-7e Goody, Magnolia Pet. 1.
20-9n-7e Ripper, Magnolia Pet. 1.
7-9n-8e Cobb, Independent, Jarvis & Holm, 1, 2.
Hetty Cobb, Independent, Jarvis & Holm 2.
Alexander, T. B. Slick 1.
8-9n-8e Cobb, Independent O. & G. 2.
Buckner, Jarvis, Holm & Atlantic 1.
Buckner, Phillips Pet. 2.
17-9n-8e Aldridge, Roxana Pet. 1.
Jefferson, Gypsy Oil 1.
Peter, Southwestern Pet. 2.
W. Peterson, Shaffer O. & R. 2, 4.
15-8n-6e Ida, I. T. I. Oil 1.
17-8n-6e Mothoye, Magnolia Pet. 1.
14-8n-7e Davis, Gypsy Oil 1.
Carolina, Magnolia Pet. 5.
Jackson, T. B. Slick 4.
23-8n-7e L. Walker, Magnolia Pet. 1.
Hanning, Magnolia Pet. 2.
Johnson, Mid-Cont. Pet. 1.
25-8n-7e Logan, Dixie Oil 1.
26-8n-7e Mulliah, Magnolia Pet. 1.
28-8n-8e Foster, Dixie Oil 5.
29-8n-8e Walker, Independent & Sinclair 3.
Walker, Magnolia Pet. 3.
31-8n-8e Salinda, W. R. Ramsey 1.
31-8n-8e Sampson, W. R. Ramsey 2.
Amos, W. R. Ramsey 5.
32-8n-8e Grayson, Amerada Pet. 1, 2, 3, 4.
Parker, Magnolia Pet. 1, 2.
Franz, Magnolia Pet. 5.
33-8n-8e Long, Magnolia Pet. 3.
3-7n-6e Litka, Empire G. & F. 1.
9-7n-6e Litka, I. T. I. Oil 1.
22-7n-7e Jackson, Magnolia Pet. 1.
Davis, Transcontinental 2.
5-7n-8e Simon, Independent & Atlantic 2, 3, 4.
Harjo, Magnolia Pet. 4, 6, 7, 8, 9, 10, 11.
6-7n-8e Davis, Magnolia & Atlantic 3, 4.
Gilstrap, Magnolia Pet. 2.
Carolina, Homaokla Oil 3, 4, 5, 6, 7.
Knight "A," Dixie Oil 2.
Knight "C," Dixie Oil 3.
McIntosh, Atlantic O. P. et al 1.
6-6n-8e Winey, F. F. Garland & Co. 1.
1-9n-5e Sango, F. J. Searight 1.

**Wells Shut Down**

10-11-8e Davis, Transcontinental Oil 1.
33-10-6e Davis, F. J. Searight 1.
31-8n-6e Pullatka, Superior Oil 1.
14-8n-7e Jackson, T. B. Slick 3.
15-8n-7e Carolina, Magnolia Pet. 3.
9-8n-8e Miller, T. Atkins 1.
30-8n-8e Bowlegs, Gardner Pet. 1.
6-7n-8e Hawkins, Buttram et al 1.
25-6n-6e Minton, T. B. Slick 1.
33-6n-6e Christy, Palmetto Oil 1.
24-5n-5e Nitley, Riverside O. & R. & Kinney 1.
Rigs, 16; wells drilling, 112; total, 128.

**OKFUSKEE COUNTY**

**Rigs**

32-12-11 Hulsey, Josey Oil 1.
33-12-11 McCoy, Josey Oil 15.
36-11-9e Buck, Minnehoma Oil 1.
Buck, Amerada Pet. 1.
Mecco, Sinclair Oil 2.
3-11-10 Stidham, Link Oil 1.
4-11-10 Stidham, Moose & Daniels 1.
8-11-11 Mahardy, K. Leard et al 1.
22-11-11 Grayson, Champlin O. & R. 8.
36-11-11 Holmes, W. L. Umborn 1.
17-10-9e Carolina, Will McCulloch Oil 1.
21-10-11 Barnett, Lou Umburn & Future Dev. 1.

**Wells Drilling**

23-13-7e Byrd, Sinclair Oil 1.
11-13-8e Taylor, Mal De Mar Oil 1.
17-12-7e Hennechuchee, Mid Kansas Oil 1-A.
14-12-8e Lewis Isaac, Western State Oil 1.
18-12-8e Bear, Dalton & Baker 1.
14-13-9e Callahan, Darby Pet. Co. 2.
7-12-9e Jones, Blakely O. & G. 1.
17-12-10 Harrison, Amerada Pet. Corp. 2.
27-12-10 Harjoche, The Texas Company 1.
3-12-11 Grayson, J. J. Deaner 2.
10-12-11 Hook, E. L. Robinson 1.
Randall, Barnsdall Oil 1, 2.
Randall, Phillips Pet. Co. 1.
13-12-11 Canare, Central Oil 3.
Sugar, Independent and Anglo-Tex. 11-A.
15-12-11 Hill, Independent O. & G. 2-A.
22-12-11 Holmes, Hartman & Mann 1.
32-12-11 Hulsey, Josey Oil Co. 3.
33-12-11 McCoy, Josey Oil Co. 4, 11, 14.
Fields, Josey Oil Co. 1, 4.
35-11-9e Severs, E. L. Robinson 1.
14-11-10 Buckley, Terrien & Ballerie 1-A.
11-11-11 Smith, Bingham & Smith 3.
Hopwood, Colorado O. & G. 3.
13-11-11 Holmes, Independent O. & G. 14.
25-11-11 Barnett, Carter Oil Co. 2.
30-11-11 Holmes, Riverland Oil 1.
1-11-8e Harris, Wilcox O. & G. 1.
15-10-9e Bruner, Burk Greis 1.
16-10-9e Bruner, Independent O. & G. 1.
17-10-9e Walker, Minnehoma Oil 1.
21-10-9e Tecumseh, Kingwood Oil 1.
33-10-9e Barnett, Arkansas Fuel Oil 2.
26-10-10 Butler, Schrock & Jameson 1.
1-10-11 Robinson, T. A. Johnson & Umburn 1.
11-10-11 Hill, Lou Umburn 1.
7-10-11 Birdcreek, Guy Fisher & Carter Oil 2.
30-11-10 Groves, Prairie O. & G. 1.

**Shut Down**

3-12-10 Hivem, Alex Bays et al 1.
8-12-10 Yarhola, Blakely et al 1.
23-12-10 Harjo, Blakely et al 1.
13-12-11 Sugar, Independent and Anglo-Tex. 1-B, 6.
Harjoche, Amerada Pet. 13.
Looney, J. K. Leard 3.
33-12-11 McCoy, Josey Oil 1.
13-11-11 Holmes, Independent O. & G. 15.
22-11-11 Holmes, Champlin O. & R. 8.
23-11-11 Lekowskie, Frank Havel 1.
24-11-11 Fields, Lyons Pet. 8.
15-10-10 Tiplaw, Pratt & Burton 1.
18-10-11 Alberty, Amerada, Morgan & Flynn 1.
Simmer, Amerada Pet. 1.
2-10-12 Goober, W. C. Newman 1.
Rigs, 12; wells drilling, 59; total, 71.

**HUGHES COUNTY**

**Rigs**

13-9n-8e Paldo, Johnson, Ashe et al 1.
26-9n-9e Foster Inv. & Independent 2.
3-8n-9e Harjo, J. E. Burke et al 1.
14-8n-9e Long, Independent O. & G. 1.
5-7n-8e Garner, Dixie Oil 6, 7, 8.
Frederick "A", Amerada Pet. 2, 13.
Garner, Humble O. & R. 2.
Ferguson, J. K. D. Shaffer 1.
Foster, Independent and Sinclair Oil 1.
Street, Magnolia Pet. 2.
Garner, Magnolia Pet. 2.
2-6n-8e Hardage, Humble O. & R. 1.
11-5n-8e Stewart, Parmenter et al 1.

**Wells Drilling**

1-9n-9e Cain, Minnehoma Oil 1, 3.
Arbor, Josey Oil 5.
4-9n-9e Alexander, Papoose Oil 10.
18-9n-9e King, Magnolia Pet. 1.
19-9n-9e L. Charles, I. T. I. Oil 1.
22-9n-9e Manley, Josey Oil 2.
26-9n-9e B. Harjo, Transcontinental Oil 4, 6, 8, 9.
27-9n-9e Long, Gypsy Oil 2, 3.
Brown, Foster Inv. Co. 1.
Long, Phillips Pet. 4.
10-9n-10 Anna Lee, Detrick et al 1.
24-9n-10 Barnett, Roxana Pet. 1.
10-8n-9e Harnage, Sands Pet. 1.
22-8n-9e Long, J. L. Brock et al 1.
25-8n-9e Harjo, Independent O. & G. 1.
28-8n-9e Reed, Independent & Margay Oil 1.
McCrory, Magnolia Pet. 1.
29-8n-9e Lowe, Kingwood Oil 1.
Carboge, Papoose Oil 1.
18-8n-10 Diamond "A", Dixie Oil 2, 3.
32-8n-11e Bear, Johnson, Ashe et al 1.
5-7n-8e Garner, Dixie Oil 2, 3, 4, 5.
Frederick, Amerada Pet. 2, 4, 5, 6, 7, 8, 9, 10, 11, 12.
Garner, Humble O. & R. 1.
Ferguson, Gilcrease Oil 1.
Street, Magnolia Pet. 1.
Garner, Magnolia Pet. 1.
J. S. Garner, Magnolia Pet 1.
8-7n-8e Turner, Magnolia Pet. 1.
29-7n-8e Harjo, Magnolia Pet. 1.

**Shut Down**

26-9n-9e Proctor, Independent & Darby Pet. 1.
21-9n-10 Buck, Fuhrman & Newman 1.
4-9n-11 Harjo, Gibson & Zahniser 2.

17-8n-10 Carter, Robinson Fletcher et al 2.
8-6n-10 Kite, Walton, Snyder & Marshall 1.
30-5n-10 Pearson, Henry Greis & Kerr 1.
Rigs, 16; wells drilling, 54; total, 70.

**MUSKOGEE AND WAGONER COUNTIES**

**Rigs**

29-18-16 Hawkins, B. B. Wheeler et al 1.
28-17-16 Sarty, Sevreda Oil 1.
6-16-17 Adams, Mutual Oil 2.
30-15-15 Vanderslice, H. P. Culp et al 2.
17-15-17 Warrior, W. R. Sommerville 1.
31-15-19 Smith, Ozark Drlg. Co. 1.
28-14-16 Brown, Jolly & Ogg 1-A.
28-14-17 Dean, E. C. Dooley et al 2.
27-13-19 Neal, Clay Brown and W. D. Sneddon 1.

**Wells Drilling**

19-18-16 Moody, J. Stryker 2.
29-18-17 Abrams, Flint Ridge Oil 2.
25-17-16 White, Stogdill et al 4.
18-17-17 Bruner, Mitchell Oil 1.
11-16-16 Watson, Geo. Wilson et al 1.
35-16-17 Marshall, Denton & Marshall 1.
8-16-18 Chissoe, B. B. Wheeler et al 1.
4-15-15 Simmons, Crandall & Murta 1.
14-15-15 Smith, King & King 6.
Smith, Papoose Oil 1.
29-15-15 Morris, Cory & Anders 1.
Sango, Link Oil 6.
32-15-15 Vanderslice, R. L. Kistler 4.
33-15-15 Jefferson, Brothers Oil 2.
1-14-17 Sango, T-O Pet. 7.
17-14-17 James, R. H. Price et al 2.
18-14-17 James, Peterson et al 6.
5-14-19 Gardner, C. M. Bradley et al 2.
19-14-19 Hardeshell, E. M. Johnson 1.

**Shut Down**

28-18-17 Childers, R. M. Lear 1.
18-16-15 Peter, Hart et al 4.
34-15-18 Dean, J. A. McCormick 7.
20-13-16 London, Boomer Oil 1.
Rigs, 9; wells drilling, 23; total, 32.

**CREEK COUNTY**

**Rigs**

1-14-7e Ford, Prairie O. & G. 2.
4-18-7e Atkins, Gem Oil 25.
16-18-7e Coker, Magnolia Pet. 29.
22-17-8e Johnson, Savoy Oil 5.
26-17-8e Cobb, Barnsdall Oil 3.
20-15-8e Beaver, Skelly Oil 1-A.
30-15-8e Benjamin, Lima O. & G. 2.
12-14-8e McKan, Skelly Oil 14.
13-14-8e Sewell, C. G. Tibbens 10.
Farha, C. G. Tibbens 2.
22-18-9e Tiger, M. P. Evans et al 1.
8-18-10 Fields, H. Sparks et al 1.
22-18-11 Bruner, W. J. Cole 1.
6-18-12 Bigpond, Regal Oil 27.
3-17-9e Chisholm, Harwell et al 1.
21-17-9e Charcotenne, Wood & Farren 4.
10-17-10 Hay, Carpenter et al 1.
12-17-10 Harris, R. O. Bailey 1.
19-17-10 Dickson, Independent O. & G. 2.
23-17-10 Baker, Easter Oil 1-A.
24-17-10 Tahkaney, J. H. Wright 10.
26-17-10 Tiger, Nowata O. & R. 1.
Bucktrot, H. C. Wilson 2.
32-17-10 Yellowhead, Skelly Oil 1.
34-17-10 Bucktrot, B-Jack Oil 1.
16-17-11 Wilson, M. Mead et al 1-A.
29-17-11 Schmidt, Henry & Avers et al 1.
30-17-11 Garaid & Nichols, M. W. Evans 1.
7-16-9e Sango, W. R. Davis 1.
21-16-9e Hendrickson, Jackson & Wise 3.
32-16-9e Vaughan, Grahoma Oil 1.
30-15-9e Fields, C. G. Tibbens 3.
1-15-10 Ashbury, H. C. Wilson 1.
36-14-9e Lampkins, Wood Oil Co. 1.
20-14-10 Knight, Hall & Donnelly 2.

**Wells Drilling**

19-15-8e Roberts, Prairie O. & G. 1.
21-17-7e Litchfield, Prairie O. & G. 39.
3-17-9e Hope "A", Prairie O. & G. 2.
10-17-9e McMahon, Prairie O. & G. 1.
6-19-7e McElroy, Markham & Schoenfeldt.
15-19-7e Manuel, H. W. Skelly 1.
32-19-7e Richards, Magnolia Pet. 4.
5-19-8e Noble, Bartlett & Mann 2.
6-19-8e McElroy, Mann & Smith 1.
12-19-8e Porter, J. B. Grieves 1.
13-19-8e Ross, Gled Oil 3, 3.
Peters, Burlengane & Sharp 4, 5, 6.
14-19-8e Miller, Devonian Oil 3.
28-19-8e Canard, F. R. Billingslea 1.
6-18-7e Brinton, Shaffer O. & R. 7.
7-18-7e Vance, Magnolia Pet. 1.
Vida Way, Twin State Oil 3.
8-18-7e Yarhola, Riverside O. & R. 1.
12-18-7e Jones, Dixie Oil 1.
18-18-7e Fisher, Shaffer O. & R. 13.
22-18-7e Wrightsman, R. E. Freeman and Tiger Oil 1-A.
32-18-7e Derrisaw, Magnolia Pet. 2.
3-17-7e Stewart, Mid-Continent Pet. 3.
15-17-7e Stewart, Mid-Continent Pet. 25.
22-17-7e Fife, Tidal Oil 5.
5-17-8e Hendrickson, Roxana Pet. 1.
17-17-8e Wright, F. R. Billingslea 1.
22-17-8e Mitchell, Barnsdall Oil 2.
Mitchell, Barnsdall Oil 3.
Johnson, Savoy Oil 4.
Mitchell, Transcontinental Oil 1-A.
26-17-8e School land, Kite & Farren 1.
Sarhilla, O. C. Chapman et al 1.
27-17-8e Bigpond, Inter-Ocean and J. W. McCulloch 3, 4.
Bruner, Joemack Oil 1.
Bruner, Southwestern Pet. 2.
9-16-8e Yardy, Margay Oil 3.
21-16-8e Arsoyalee, Peters Pet. 3.
6-15-7e Wattie, Magnolia Pet. 1.
Steele, Pure Oil 1.
2-15-8e Harjo, Wilcox O. & G. 5.
19-15-8e Halloway, Lima O. & G. 1.
25-15-8e Herrod, C. G. Tibbens 2.
26-15-8e Narchubby, Bu-Vi-Bar Pet. 2.
31-15-8e Sissie Jim, Tidal Oil 2.
Bigpond, Carter E. Davis 1-A.
4-14-8e Brown, Simms Oil 1.
12-14-8e Bruner, C. G. Tibbens 9.
Ponds, Haskell Oil 5.
Brown, T. P. C. & O. Co. 5.
13-14-8e Sewell, C. G. Tibbens 11.
30-14-8e McGilbray, Black Gold Oil 1-A.
1-19-9e Carolina, Buckeye Drlg. Co. 3.
9-19-9e Ford, Christy & McMahan 2.
4-19-9e Fulson, Curtis Oil 1.
16-19-9e Sewell, Roxana Pet 1-A.
20-18-9e Grayson, J. W. McCullouch 1.
21-18-9e Walker, J. A. Hull 2.
30-18-9e Sherman, H. U. Bartlett 1-A.
4-18-10 Berryhill, Ike Simmons et al 1.
30-18-10 Marshall, Madden & Madden 1.
3-18-11 Leader, Gray Oil 2.
12-18-11 Land, E. L. Kistler 1-A.
14-18-11 Unallotted, Slater O. & G. 11.
15-18-11 Snow, Redgraves et al 1.
5-18-12 Sizemore, S. E. Benson 1.
6-18-12 Sango, Sunray Oil et al 5.
Unallotted, Sunray Oil et al 5.
3-17-9e Simmons, The Texas Company 1.
10-17-9e Winn, C. L. McMahon 1.
Bruce, Roxana Pet. 1.
21-17-9e Harjoche, T. P. C. & O. Co. 7.
11-17-10 Smith, Ted Lillystrand 1-A.
16-17-10 Littlehead, M. P. Evans 1.
19-17-10 Dickson, The Texas Company 1.
Wanuke, A. B. Ice 3.
22-17-10 Gwin, Dillard et al 1.
23-17-10 Fulson, Kirshner et al 1.
Holden, Kirshner et al 2-A.
24-17-10 Bucktrot, Pioneer Pet. 6.
Dawson, J. H. Wright 11.
Tahkaney, J. H. Wright 8.
30-17-10 Sneed, Independent O. & G. 1.
5-17-11 Jackson, Burk Greis 1-A.
7-17-11 McDougal, M. P. Evans 1.
10-17-11 Cumsey, Deems et al 2.
17-17-11 Wacoche, Shaffer O. & R. Co. 5.
34-17-11 Tiger, Overless et al 1-A.
21-16-9e Jacobs, Emery & Son 7.
28-16-9e Scott, Joemack Oil 4.
32-16-9e Hamilton, Wilcox O. & G. 7.
36-16-9e Allen, Williams & Bell 1.
8-16-10 Sividan, Williams & Cole 1.
12-16-10 Hughes, Shaffer O. & R. Co. 1.
12-16-11 Childress, Edgerton et al 1.
34-16-11 Lowe, Iron Mountain Oil 1.
24-15-9e Edwards, J. W. McCullouch 1.
30-15-9e Unallotted, C. G. Tibbens 27, 28, 29, 30.
31-15-9e Unallotted, Carter Oil 1.
Lucas, Skelly Oil 2.
5-14-9e Long, Joemack Oil 1.
Thompson, C. G. Tibbens 1.
17-14-9e Lucas, Gladys Belle Oil 1.
11-14-10 Webb, H. George et al 1.
16-14-10 Bear, Atlantic O. P. 1.
30-14-10 Craig, Wood Oil 2.
32-14-10 Walker, Mid-Continent Pet. 5.

**Shut Down**

30-18-8e Holman, J. O. Walters et al 1.
17-17-7e Tiger, Gibson & Baker 1-A.
27-17-8e Alec, T. B. Slick & Stover 3.
27-18-10 Allen, Vaughn & Wheeler 6.
14-18-11 Tiger, O. N. White 1-A.
28-18-11 Pahcahney, Riverland Oil 1.
32-18-11 Frew, Cross et al 1.
6-18-12 Sango, Sunray Oil et al 3.
24-17-10 Dawson, J. H. Wright 8.
21-16-9e Greenwood, Joemack Oil 2.
12-16-10 Unallotted, Sherry et al 1.
5-14-10 Groom, Evans et al 1.
29-14-10 Bear, Independent O. & G. 1.
26-17-8e Cobb, Barnsdall Oil 4.
Rigs, 35; wells drilling, 128; total, 163.

**PAWNEE COUNTY**

**Rigs**

22-23-4e Zoldoskie, Donahue & Carter Oil 4.
27-23-4e Brian, J. L. Donahue 1-A.
26-22-5e Redd, Bu-Vi-Bar Pet. 1.
16-21-6e School land, 101 Ranch Oil 1.
24-21-7e Mullendore, Minnehoma Oil 7.
32-21-8e Sigon, Adamson C. O. & G. Co. 7.
33-20-5e School land, Marland and Mid-Continent Pet. 1, 2.
3-20-6e McCroskey, Geo. Baker et al 1.
32-20-5e Berry, Magnolia Pet. 2.
16-20-6e Burgman, Jim Glenn Oil 4.
17-20-6e Baker, Magnolia Pet. 3.
36-20-6e School land, Riverside O. & R. 1.
7-20-8e Childers, Minnehoma Oil and Shelts 4.
24-20-8e Hennessey, McMahon Oil 7.

**Wells Drilling**

6-20-8e Cotton, Prairie O. & G. 3.
23-20-7e Yeager, Prairie O. & G. 1.
10-20-8e McNeal, Prairie O. & G. 6.
33-23-3e Miller, Watchorn Oil 13.
4-22-3e Miller, Magnolia Pet. 10.
5-22-3e Wolfe, Champlin Ref. 1.
9-22-3e Arkeketa, Magnolia Pet. 2.
13-23-4e School land, Magnolia Pet. 1.
4-23-5e Krow, Magnolia Pet. 1.
16-22-4e School land, Magnolia Pet. 1.
1-21-6e Bryon, Independent O. & G. 1.
8-21-6e Robertson, Dixie Oil 1.
25-21-6e Morris, Homa-Wood Oil 1.
13-21-7e McIntyre, Minnehoma Oil 5.
31-21-8e Anglin, J. B. Grieves 6.
32-21-8e Meyers, Adamson, C. O. & G. 3.
34-21-8e Widener, Gypsy Oil 18.
35-21-8e Norman, Gypsy Oil 5.
20-20-5e Goodchief, Champlin O. & R. 1.
33-20-5e Pollock, Gypsy Oil 3.
2-20-6e Newell, Magnolia Pet. 1.
9-20-6e Privett, Magnolia Pet. 4.
B. Fugate, Magnolia Pet. 2.
16-20-6e School land, Magnolia Pet. 5.
19-20-6e White, Champlin O. & R. 1.
22-20-6e Lesher, Fern Oil 3.
21-20-6e Freeman, Josey Oil 5.
21-20-7e Subiet, Tidal Oil 10.
25-20-7e Brown, Burton et al 4.
10-20-8e Dunn, Selby O. & G. 1.
18-20-8e Turner, Shortgrass et al 1.
23-20-8e Van Emans, Selby O. & G. 5.
27-20-9e Mitchell, Suppees & Abeicht 1.
24-20-7e Baker, Ora Steen 1.

**Shut Down**

33-23-3e Miller, Watchorn Oil 7.
5-23-5e Phillips, Haley, Garber & Pulse 3.
23-21-7e Carter, Turner et al 1.
28-20-6e White, Davis Drlg. Co. 1.
2-20-7e Peacock, Enfisco Oil Corp. 1.
11-20-7e Rogers, Block & Carnahan 1-A.
6-20-8e George, Producer Consolidated Oil 1-A.
4-20-7e Hallett Townsite, W. A. McCabe et al 1.
Rigs, 15; wells drilling, 42; total, 57.

**KAY COUNTY**

**Rigs**

21-29-1w Duncan, Comar Oil 10.
16-29-1e School land, Wentz Oil 2.
17-29-1e Brockhouser, Vernon Oil 4.
5-28-1w Lawrence, Comar Oil 3.
8-28-1w Horne, Comar Oil 3.
Andrews, Wentz Oil 1.
28-28-2e Huddleson, John Stark et al 1.
3-27-1w Moore, Arkansas Fuel Oil 1.
4-27-1w Kelly, Arkansas Fuel Oil 6.
10-27-1w Moore, Black Gold Oil 3.
1-26-2w Hockstater, Marland Oil 3-A.
Fitzgerald, Marland Oil 2-A.
12-26-2w North, Marland Oil 7.
Hubbard, Marland Oil 6.
5-28-1w Townsite, Braman Oil 2.

**Wells Drilling**

1-26-2w Smith "B", Prairie O. & G. 7.
17-27-1w Boyce "B", Prairie O. & G. 1.
1-26-2w Smith "A", Prairie O. & G. 7.
21-29-1w Duncan, Comar Oil 12.
17-29-1e Dickerson, Marland Oil 1.
25-29-1e Smith, Strosnyder et al 1.
29-29-1e Meyer, Carter Oil 1.
4-28-2w Wood, Moore Oil 1.
20-28-2w Smith, Mississippi Valley Oil 1.
5-28-1w McCullough, Comar Oil 5.
Bechtel, Comar Oil 1-W.
Orr, Comar Oil 2.
Townsite, Braman Oil 1-W.
8-28-1w Horne, Comar Oil 1-W, 4.
27-28-1w Walker, Simms Pet. 1.
6-28-1e Wolfe, McComas et al 1.
31-28-3e Street, Davis Drlg. Co. 1.
3-27-1w Dowes, Tidal & Ostot 1.
4-27-1w Kelly, Arkansas Fuel Oil 4, 5.
Moore, Schouwald et al 1.
Case, Polling & Denny 3, 4.
5-27-1w Jameson, Blackwell O. & G. 2.
8-27-1w Boggs, Tidal Oil 3.
Moore, Blackwell O. & G. 1.
Burkholder, The Texas Company 2.
9-27-1w Brown, Harris & Hahn 3, 4.
Geiger, Blackwell O. & G. 6, 7, 8.
10-27-1w Patterson, Ostot, Hoag & McCam 1.
17-27-1w Jameson, Carter Oil 3.
Robinson, Marland Oil 1-A.
Payne, Comar Oil 1.
19-27-1w Gaylor, Marland Oil 1.
27-27-1w Peckman, Dance et al 1.
31-27-1w Cade, Marland Oil 1.
32-27-1w Chamber, O'Kansas Oil 1.
28-27-1e Buessing, Ballentine et al 1.
3-27-2e Balzar, Mississippi Valley Oil 1.
12-26-2w North, Marland Oil 2-A, 3-A, 4.
28-26-1w Barclay, Tom Palmer et al 1.
32-26-2e McNeil, Ponca Lee Oil 1.
13-25-2w School land, Marland Oil 1, 7.
21-25-2w Turk, Carter Oil 5.
28-25-1w Gardner, Gypsy Oil 1.
Mahoney, Wentz Oil 9.
Siler, The Texas Company 2.
35-25-1w Endicott, T. B. Slick 7.

**Shut Down**

20-29-1w Day, The Texas Company 2.
21-29-1w Priboth, Comar Oil 2, 7.
Harvell, Comar Oil 8.
30-29-1e Hennessey, Junction Oil 2.
5-28-1w Orr, Comar Oil 1.
11-28-1e Lowery, Okla. Northern O. & G. 1.
3-28-3e Eaton, Parkhurst & Graham 1.
16-27-1w Barr, Manahan et al 2.
Slocum, Anoka Oil 3.
18-27-1w Johnson, Una Lee Oil 1.
15-25-1w McDaniels, Tonkawa Dev. 1.
33-25-1w School land, Cosden & Marland 10.
34-25-1w Endicott, Pennock Oil 2.
4-25-2e Foureyes, Marland Oil 10.
6-26-1w Glasgow, National Union Oil 1.
Rigs, 15; wells drilling, 71; total, 86.

**PAYNE COUNTY**

**Rigs**

32-20-5e Pleasants, Magnolia 5.
5-17-4e Sharrum, Mulberry Oil 4.

**Wells Drilling**

22-20-3e Royester, Ossenbeck 1.
23-20-4e Windstaff, Wentz Oil 1.
4-19-1w Kinneman, Reiter-Foster 1.
12-19-1w Combs, Tidal Oil 1.
13-19-4e Stover, Roxana Pet. 4.
14-19-4e Shannon, Magnolia Pet. 1.
Erwin, Olean Pet. 2, 3.
Stephenson, Mid-Continent Pet. 1.
23-19-4e Ellis, Olean Pet. 2, 3.
Stover, Magnolia Pet. 1.
24-19-4e Pleasants, Magnolia Pet. 3, 4, 6.
Bolton, Olean Pet. 4.
36-19-4e School land, Magnolia Pet. 1.
14-19-5e Myers, Twin State Oil 1.
35-19-5e Laughlin, Josey Oil 11.
36-19-5e Long, Josey Oil 5.
11-19-6e Barry, A. A. Bailey and Superior Oil 1.
22-18-3e Berry, Mulberry Oil 1.
Nelson, T. P. C. & O. Co. 1, 2.
Nelson, J. A. Hull Oil 2.
23-18-3e Haley, Amerada Pet. 3.
Ostrander, Deep Rock O. & G. 1.
Derry, Deep Rock O. & G. 5.
Shannon, Deep Rock O. & G. 2, 3, 4.
Givens, Shaffer O. & R. 2, 3, 4, 5.
Ostrander, Pure Oil 2.
26-18-3e Liston, Empire G. & F. 1, 2, 3, 4.
Waltman, T. C. M. Oil 3, 4.
27-18-3e Ethridge, Deep Rock O. & G. 2.
Murlin, Gypsy Oil 1.
10-18-4e Cole, Deep Rock O. & G. 1.
26-18-4e Broyles, New England O. & P. L. 2.
31-18-4e ———, Superior Oil 1.
1-18-5e Laughlin, Home Gas 2.
2-18-5e Busbee, Josey Oil 2.
7-18-5e Goss, P. & R. Corp. 2-A.
Blue, Marland Oil 3.
8-18-6e Welch, Consolidated Drlg. 1-A.
6-17-4e Kirk, Home Gas 1.
Payne, Magnolia Pet. 1.
14-19-4e Shannon, Prairie O. & G. 1.

**Shut Down**

2-20-2e Catts, Colorado O. & G. 1.
21-19-1w Lewis, Ponca O. & G. 1.
13-19-4e Stover, Roxana Pet. 2, 5, 6.
8-19-5e Garr, Garr Oil 4, 5.
1-18-5e Laughlin, Josey Oil 4.
27-18-6e Culbertson, McGill et al 1.
Rigs, 2; wells drilling, 64; total, 66.

**LINCOLN COUNTY**

**Rigs**

31-17-4e Scott, Roxana Pet. 1.
4-14-5e Thompson, Magnolia Pet. 6.
11-14-5e Chapman, Magnolia Pet. 3.
16-13-5e School land, Amerada Pet. 1.

**Wells Drilling**

3-14-5e Stout, Prairie O. & G. 21, 22.
35-15-5e Sporleder, Prairie O. & G. 2, 4.
10-14-5e Cage, Prairie O. & G. 1.
8-14-5e Martin, Prairie O. & G. 1.
33-17-4e Griswald, Mid-Kansas Oil 1.
30-17-5e West, Carter Oil 1.
5-16-5e Van Camp, T. P. C. & O. Co. 1.
26-16-5e Rittenhouse, Flynn & Morgan 1.
35-16-6e Johnson, Madden & J. A. Hull 1.
25-15-3e Lillibridge, Wilcox O. & G. 1.
16-15-4e School land, Empire G. & F. 1.
33-15-5e Temming, Magnolia Pet. 1.
34-15-5e Sporleder, Magnolia Pet. 4.
M. & F. Sporleder, Magnolia Pet. 8.
35-15-5e Caves, Gypsy Oil 10, 11.
5-15-6e Howard, Independent O. & G. 2.
8-15-6e Kilgore, Magnolia Pet. 1.
Earp, Mid-Continent Pet. 5, 6, 7.
Kilgore, Phillips Pet. 2.
16-15-6e School land, Sinclair Oil 1.
7-14-4e Norton, T. B. Slick 1.
2-14-5e Tuttle, Carter Oil 8.
Hopkins "C", The Texas Company 3.
3-14-5e Belless, Amerada Pet. 8.
Belless, Magnolia Pet. 2, 3.
4-14-5e Thompson, Magnolia Pet. 4.
Strough, Pure Oil 2.
8-14-5e Slack, Magnolia Pet. 1.
10-14-5e Chapman, Magnolia Pet. 2.
M. Chapman, Magnolia Pet. 2.
Patterson, Phillips Pet. 6, 7.
11-14-5e Caves, Gypsy Oil 12, 14.
Robertson, The Texas Company 1.
Chapman, Magnolia Pet. 2.
21-14-5e Deane, Southwestern Pet. 1.
27-14-5e Garrett, Sinclair Oil 1.
22-14-6e Sac & Fox school land, Wilcox O. & G. 3.
7-13-3e Ewing, Douglas Oil 1.
33-13-4e Williams, Phillips Pet. 1.
12-13-6e Reeves, Amerada Pet. 1.
5-12-3e Jones, Wilcox O. & G. 2.
1-12-5e Thompson, Independent & McCulloch 1.

**Shut Down**

36-15-4e Cull, Ruby et al 1.
34-15-5e A. E. Sporieder, Magnolia Pet. 3.
15-15-6e Hubbard, Johndahl 1.
1-14-5e Powers, Sinclair Oil 1.
10-14-5e Davenport townsite, Magnolia Pet. 1.
Davenport townsite Block 3, Magnolia Pet. 1.
Rigs, 4; wells drilling, 56; total, 60.

**NOBLE COUNTY**

**Wells Drilling**

18-24-2w Coulter, Olean Pet. 1.
16-24-1w School land, Cosden & Marland 12.
21-24-1w Smithisler, Champlin Ref. 2.
1-24-1e 101 Ranch, George Miller 1.
9-24-1e Miller, Independent O. & G. et al 1.
14-24-2e Edmonds, Ossenbeck et al 1.
15-23-2w Washburn, Sinclair Oil 1.
22-23-2w Brumfield, Mid-Continent Pet. 15.
18-22-2w Pfrimmer, Hartman & Skaer 1.
26-22-2w Schoop, Champlin Ref. 1.
33-22-2w Burk, Elane Oil 1.
13-22-2e Tillman, Skelly and A. D. Crow 1.
15-21-2w Taylor, Magnolia and Bu-Vi-Bar Pet. 1.
16-21-2w Hoffman, Magnolia Pet. 1.
B. Hoffman, Magnolia Pet. 2.
Hoffman, Red Bank Oil 1.
Treman, Red Bank Oil 1.
21-21-2w Reynolds, Magnolia Pet. and Bu-Vi-Bar 1.
22-21-2w Weeder, Magnolia Pet. 1.
28-21-2w Snyder, Bu-Vi-Bar 1.
32-20-1e Hall, Nelson & Hardin 1.

**Shut Down**

22-24-2w Kurby, Wilkins & Kors 1.
7-21-1w Williams, R. L. Corley 1.
12-21-3e Sawyer, Ossenbeck & McMann 1.
29-24-1w Reed, Mid-Continent Pet. 6.
Wells drilling, 25; total, 25.

**GARFIELD COUNTY**

**Rigs**

24-24-3w Dixney, Failing & Lawson 1.
36-23-5w Nelson, Ostot et al 1.
13-22-4w School land, Mid-Continent Pet. & Marland 60.
Walker North, Sinclair Oil 48, 50, 51, 54, 55, 56, 57, 58, 59.
24-22-4w Belveal, Healdton Pet. 53.
Belveal, Sinclair Oil 21.
36-22-4w Metcher, Sinclair Oil 16-A.
18-22-3w Schroeder, Roxana Pet. 6-T, 7-T.
Hartley, Sinclair Oil 43, 45, 46, 47, 48, 50.
19-22-3w Kisner (West), Sinclair Oil 12, 51.
11-21-4w Fee, Beople et al 1.
5-21-3w Cain, Pender Pet. 2.
6-21-3w ———, Imo Oil 1.

**Wells Drilling**

1-22-4w Johnson, Prairie O. & G. 2.
12-22-4w Wishard, Prairie O. & G. 12.
6-21-3w Bostwick, Prairie O. & G. 1.
22-24-6w Zalondek, Wilcox O. & G. 1.
10-24-4w Meyers, Sinclair Oil 1.
32-24-4w Brunkin, Shaffer-Gardner 1.
14-24-3w Gorusch, Sagar Oil 1.
34-24-3w Hayes, Roxana Pet. 1.
15-23-5w Hennessey, Wilcox O. & G. 1.
6-23-4w Chevelier, Haley, Garber & Pulse 1.
29-23-4w Bunker, Roxana Pet. 1.
31-23-4w Johnson, Bu-Vi-Bar Pet. 1.
19-23-3w Garber, Marland Oil 1.
12-22-4w Wishard, Mid-Continent Pet. 17, 18.
13-22-4w School land, Mid-Continent Pet. & Marland 6-A, 46, 59, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71.
Denker, Sinclair Oil 6.
Walker (North), Sinclair Oil 15, 31, 38, 41, 42, 43, 44, 45, 46, 47, 49, 52, 53.
Wolfe, Roxana Pet. 3, 4-W.
24-22-4w Belveal, Healdton Pet. 19.
Belveal, Sinclair Oil 21.
36-22-4w Ed Kisner, Sinclair Oil 7.
7-22-3w Lynds, Franchott 3.
18-22-3w Schroeder, Roxana Pet. 7, 8, 11, 15, 10-A, 10-W, 2-H, 4-H, 8-H, 2-L, 4-L, 7-L, 8-L, 9-L, 11-L, 2-T, 4-T, 5-T, 8-T, 9-T.
Hartley, Sinclair Oil 4, 6, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44.
Whitney, Sinclair Oil 6.
19-22-3w Kisner (East) 8, 15, 26, 27, 28, 30.
21-22-3w Allen, Champlin O. & R. 2-A.
30-22-3w Burns, Sinclair Oil 1.
L. Crews, Sinclair Oil 6.
31-22-3w McLean, Imo Oil 7.
12-21-5w Smith, Tidal Oil 1.
22-21-3w Detwiler, Slick, Harrington et al 1
11-20-8w Secor, Garfield Buell et al 1.
2-20-5w Fee, Sinclair Oil 1.
9-20-4w Looman, Marland Oil 1.
12-20-4w T. L. Miller, Marland Oil 1.
16-20-4w School land, Mid-Continent & Marland 1.

**Shut Down**

17-23-8w Dyche, Jack Reid et al 1.
26-23-7w Cox, Katherine Oil Syndicate 1.
6-23-6w Hess, Weir & Wood 1.
35-23-3w Carter, Failing & Lawson 1.
3-22-5w Swinery, Ashby & Barr 1.
1-22-4w Seaman, Hopper et al 1.
13-22-4w Wolfe, Roxana Pet. 5-W.
14-22-4w Dively, Sinclair Oil 5.
24-22-4w Beggs, Champlin Ref. 34.
Dively, Carter Oil 53.
27-22-4w Peters, Hopper et al 1.
16-22-3w School land, Hopper-Chappell 1.
18-22-3w Schroeder, Roxana Pet. 13-W.
2-21-7w Montgomery, Frank Frantz 1.
31-21-5w Vanderworek, E. A. Summers 1.
12-21-4w Schriver, Beople et al 1.
7-20-6w Semrad, O. O. Owens 1.
13-20-4w Faramel, Summers et al 1.
Rigs, 28; wells drilling, 119; total 147.

**GRANT COUNTY**

**Rigs**

24-27-3w Birdston, Burns & Beasley 1.

**Wells Drilling**

6-28-3w Snyder, Ostot Dev. 1.
19-28-3w Lehring, Wrightsman 1.
36-28-3w School land, Marland Oil 1.
2-27-3w Webb, Marland Oil 1.
22-27-3w Lane, Blackwell O. & G. 2.

23-27-3w Martin, Kay O. & G. 3.
34-26-4w Royce, Brazill & Moses 1.
16-26-3w Sherrer, Flannagan & Dedman 1.
35-26-3w Muegge, Gypsy Oil 1.
22-25-4w Vallner, Cowden 2.

**Shut Down**

14-27-3w Howell, Western States Oil 1.
22-27-3w Stewart, Western States Oil 4-A.
23-27-3w Flood, Larutan Fuel Co. 1.
23-26-3w Tabor, Lamber & Minks 1.
27-27-3w Lane, Western States Oil 1.
Rigs, 1; wells drilling, 15; total, 16.

### GRADY COUNTY

**Rigs**

31-10-8w Thompson, Hawkins & Young 1.
10-9n-6w Baker, Travis et al 1.
23-5n-8w Edmundson, Stogner et al 3.
27-5n-8w Chandler, American Drlg. Co. 1.
35-5n-8w Dryden, Magnolia Pet. 1.
8-3n-5w Horton, Carter Oil 1.
27-3n-5w Adair, Carter Oil 1.
34-3n-5w Mitchell, Magnolia Pet. 1.
Kerans, Magnolia Pet. 1.

**Wells Drilling**

3-4n-8w Dryden, Prairie O. & G. 2, 3.
31-8n-7w Webb, Watchorn O. & G. 1.
29-6n-7w Brown, Becker et al 1.
22-5n-8w Charles, Sinclair Oil 4.
35-5n-8w Dryden, J. B. Nichols Oil 2.
15-5n-7w Mull, Badgett & Hughes 1.
14-4n-8w Pendley, Magnolia Pet. 1.
31-4n-5w Anderson, Magnolia Pet. 1.
24-3n-6w Smith, C. & O. Drlg. Co. 1.
5-3n-5w Dutton, Sinclair Oil 1.
Dutton, Garvin Drlg. 1.
Gardenhire, Carter Oil 1.
21-3n-5w Kerans, Carter Oil 1.
27-3n-5w Folson, Gant et al 1.
Kilgore, Clark & Cowden et al 2.
Folson, Magnolia Pet. 1.
Mosley, White Eagle O. & R. 1.
28-3n-5w Harrison, Magnolia Pet. 3.
34-3n-5w Martin, Todd et al 1.
Wham, Carter Oil 1.

**Shut Down**

2-8n-8w Bray, John Schwartsfischer 1.
35-5n-8w Dryden, J. B. Nichols Oil 1.
10-5n-7w Kleeman, Badgett & Hughes 1.
27-3n-5w Cochran, Prairie, Clark & Cowden 1.
34-3n-5w Mitchell, McBride et al 1.
Rigs, 9; wells drilling, 26; total, 35.

### COMANCHE COUNTY

**Rigs**

30-2n-9w Indian, Continental Oil 2.

**Wells Drilling**

21-4n-10w Rowe, Mid-Kansas Oil 1.
32-4n-10w Roll, Cochran & Abernathy 1.
24-4n-10w Gamble, John Graham 2.
33-3n-10w Hendricks, Mid-Kansas Oil 1.
24-2n-10w Allen, Shaw & Rathke 1.
Allen, Humble O. & R. 1
Watson, Westheimer & Daube 1.
Cox, William Green 3.
30-2n- 9w Hardy, Magnolia Pet. 2, 3.
14-1n-12w Wilson, Green et al 1.
5-1n-10w Neely, P. W. Appleby, Jr. 1.
30-1s-13w Cox, Mid-Kansas Oil 1.

**Shut Down**

30-4n-10w Hinds, Clyde Becker 1.
35-4n- 9w Warehime, Daisy Bell Oil 1.
4-3n-10w Saounder, Cook & Graham 1.
10-2n-10w Spitler, Danciger Oil 1.
20-2n-10w School, Ashcraft et al 1.
29-1n-12w Bentley, Bentley et al 1.
Rigs, 1; wells drilling, 19; total, 20.

### STEPHENS AND COTTON COUNTIES

**Rigs**

6-2n- 8w Johnson, Hoffer Oil 1.
12-2n- 5w Iserwood, Carter Oil 3.
5-1n- 9w Borgvenski, Red Seal Ref. 1.
32-1s-10w Fink, Garvin & Urice 1-A.
27-1s- 8w Wilkinson, Pearce & Brown 4.
28-1s- 8w Springer, Winkler & McQueen 4.
12-2s- 8w Fobb, Commercial Pet. 11.

**Wells Drilling**

26-2n- 9w Richardson, Magnolia Pet. 1.
2-2n- 5w Garvin-Simms, Carter Oil 7.
Green, Carter Oil 2.
31-2n- 4w Jefferson, Lewis Clark Pet. and E. C. Montgomery 1.
25-1n- 9w Harris, Magnolia Pet. 11.
11-1n- 8w Lowery, Pet. Producers Co. 1.
30-1n- 8w Hardin, Carter Oil 7.
21-1s-10w Johns, McBee & Peacock 1.
25-1s- 9w Dora Russell, Magnolia Pet. 7.
P. Russell, Magnolia 1.
26-1s- 9w Branch, Garvin Drlg. Co. 1.
35-1s- 9w Dolch, Gant et al 1.
20-1s- 8w Brittian, Malernee & Dunlap 8.
Brittian, J. R. McQueen 5.
Birttian, Safety First 7.
D. Bartley, Magnolia Pet. 11.
26-1s- 8w Fee, Ind. Trust Co. 1-A.
28-1s- 8w Tallaferro, Carter Oil 1.
29-1s- 8w Stephens, Magnolia Pet. 2.
32-1s- 8w Shelton, Inter-Ocean Oil 9.
33-1s- 8w Surber, Empire G. & F. 34.
Glass, Magnolia Pet. 5.
34-1s- 8w Kagay, Magnolia Pet. 16.
36-1s- 8w Jameson, Merchant & Fain 1.
26-1s- 5w Skelly, Skelly Oil 28.
34-1s- 5w Ziegler, Magnolia Pet. 18.
34-2s- 7w Yates, Hawks & Ware 1.
3-2s- 5w Brown, Magnolia Pet. 3.
Harris, Magnolia Pet. 2.
11-2s- 5w Ed Martin, Magnolia Pet. 4.
8-2s- 4w Cobb, Magnolia Pet. 9.
12-3s- 7w Porter, Harry Hanbury 1.
9-5s-10w Johnson, Barker & Eaton 1-A.

**Shut Down**

7-2n- 4w Simms, Green et al 1.
10-2n- 4w Conner, Danciger Oil 1.
23-1n- 9w Brown, Steve Linson 4.
19-1n- 8w Funk, Ill.-Okla. Oil 1.
31-1n- 8w Heiser, Kinsey Law et al 3.
28-1s- 8w Nelson, V. A. Kidney 1-A.
11-2s- 9w Gunn, Pauline Oil 1.
29-2s- 7w Bristow, Womack 1-A.
12-4s-10w Cooper, W. B. Lindsey 1.
Rigs, 7; wells drilling, 42; total, 49.

### JEFFERSON COUNTY

**Rigs**

7-4s-8w Holley, Josey Oil & Griffith 1.
15-4s-4w Hardin, Twin State Oil 1.
28-6s-5w Seay, Couch & Brown 1.

**Wells Drilling**

31-6s-5w Seay, Simpson, Fell & Sigler 1.
33-6s-5w Seay, A. C. Brown 5.
Seay, Gypsy Oil 22, 23, 24, 25.
18-7s-5w James, Humble O. & R. 1.
19-7s-5w Alexander, Humble O. & R. 1.
25-7s-4w Black, Pender Prod. Co. 1.

**Shut Down**

5-4s-6w Hunton, Homa-Okla Oil 1.
21-5s-6w Cowden, Kelsey et al 1.
34-5s-6w Major, Oasis Oil 1.
23-7s-7w Hayes, L. C. Hivick et al 1.
5-7s-5w O. Seay, Woodruff Brothers 1.
Rigs, 3; wells drilling, 14; total, 17.

### PONTOTOC AND GARVIN COUNTIES

**Rigs**

17-4n-6e Phillips, Bryan et al 2.
20-1n-3w Deryden, Markham et al 1.

**Wells Drilling**

28-5n-5e Copeland, La Salle et al 1.
5-4n-6e McAlister, Pilgrim Pet. 1.
14-4n-7e Norris & Beck, Howarth O. & G. 1.
31-4n-7e Blackburn, Loss Oil 1.
35-3n-2e Franklin, T. P. C. & O. Co. 1.
32-3n-3e Hensley, Cosden et al 1.
6-3n-7e Lloyd, Ada Dev. Co. 4, 5.
27-2n-1w Pool, Empire G. & F. 1.
16-1n-3w Harris, Magnolia Pet. 8, 12.
Mauldin, Magnolia Pet. 8.
17-1n-3w Deryden, Carter Oil 7.
Deryden, The Texas Company 1-B, 2-B.
Deryden, Mid-Continent Pet. 3.
21-1n-3w Boutwell, T. P. C. & O. Co. 1.

**Shut Down**

18-4n-6e McClure, Bryan & Gillette 1.
28-4n-7e Faulkner, Hughes et al 2.
28-3n-4e Lloyd, O. F. Smith 1.
25-5n-6e Patterson, Gillette & Kreuger 1.
Rigs, 2; wells drilling, 21; total, 23.

### CARTER COUNTY

**Rigs**

18-1s-3w Hardin, Magnolia Pet. 2.
34-1s-3w Hernstadt, Gilmer 2.
Fish, Magnolia Pet. 4.
Newstadt, Magnolia Pet. 3.
Parnell, Simpson & Fell 3.
3-2s-3w Carpenter, Magnolia Pet. 1.
4-2s-3w Johnson, Humble O. & R. 1.
10-2s-3w Grimes, Wirt Franklin 1.
23-2s-3w E. Lohman, Magnolia Pet. 10.
M. Williams, Magnolia Pet. 1.
McClain, Magnolia Pet. 1.
7-2s-2w Higgins, Coline Oil 9.
15-2s-2w Cox, Magnolia Pet. 1.
27-2s-2w Noble, F. W. Merrick et al 3.
3-5s-1e Dove, Schermerhorn et al 1.

**Wells Drilling**

18-1s-3w Hardin, Magnolia Pet. 2.
19-1s-3w Jordan, Humble O. & R. 4.
Winters, Magnolia Pet. 1-A.
31-1s-3w Moore, Magnolia Pet. 1.
33-1s-3w Lusk, Humble O. & R. 4.
34-1s-3w Snyder, Humble O. & R. 1.
Hernstadt, Gilmer 3.
Fish, Magnolia Pet. 3, 5.
Sikes, Schermerhorn et al 1.
Gault, Simpson & Fell 1, 2.
Parnell, Simpson & Fell 2.
Snyder, Westheimer 1.
2-2s-3w Calvery, Schermerhorn 1.
Delman, Magnolia Pet. 1.
4-2s-3w Suiter, Humble O. & R. 1.
15-2s-3w Howard, Twin State Oil 1.
Jennings, Lathrop-Dennis and W. Franklin 1.
Carpenter, Mid-Continent Pet. 1.
22-2s-3w Carpenter, Humble O. & R. 8.
Morris, Magnolia Pet. 1.
Calvery, Wirt Franklin 1.
Carpenter, Wirt Franklin 6.
23-2s-3w S. Lohman, Magnolia Pet. 4.
29-2s-3w Morris, Gypsy Oil 3.
32-2s-3w Johnson, Sturm Drlg. Co. 1.
Feagin, Sturm Drlg. Co. 2.
6-2s-2w Higgins, Coline Oil 6.
7-2s-2w Pierce, Coline Oil 9.
Higgins, Coline Oil 5, 7.
Watkins, Iowa Oil 1, 2.
Caughman, Roxana Pet. 1.
8-2s-2w Pierce, Skelly Oil 1, 2.
15-2s-2w Pierce, Magnolia Pet. 1.
Cox, Magnolia Pet. 1.
16-2s-2w Higgins, Rogana Pet. 1-B.
May Cox, Magnolia Pet. 2.
18-2s-2w Pierce, Wirt Franklin 1.
23-2s-2w Noble, Magnolia Pet. 1.
25-2s-2w McCoy, Hivick et al 1.
8-3s-2w Moyer, Merrick-Cameron 7.
Watkins, Schermerhorn 4.
Moyer, Humble O. & R. 3.
Fitzgerald, F. W. Merrick et al 1.
16-4s-2w Shellenburg, Magnolia Pet. 12.
22-4s-2w Dillard, Baker & Strawn 12.
1-4s-3e Barnes, Humble O. & R. 1.
35-5s-1w Joy, Humble O. & R. 1.
20-5s-1e Baptiste, Amerada Pet. 23.
Farve, Amerada Pet. 24, 27.
24-5s-1e Jelliff, Schermerhorn et al 1.
28-5s-1e Westheimer, Amerada Pet. 14.

**Shut Down**

19-1s-2w Morris, McGee 1.
13-5s-3w Beal, Wickenhiser 1.
Rigs, 15; wells drilling, 59; total, 74.

### MISCELLANEOUS COUNTIES

**Rigs**

**Harper County—**
30-29-22w ———, D. T. Water 1.
**Woodward County—**
4-23-17w Nordyke, Diamond Drlg. Co. 1.
**Kingfisher County—**
12-18-5w ———, Marland Oil 1.
20-15-8w Otis, Hoffman et al 1.
23-15-5w Davidson, Reiter-Foster 1.
**Logan County—**
11-18-3w Matthews, Santrock Drlg. Co. 1.
28-17-1e Woods, T. B. Slick 1.
**Oklahoma County—**
7-14-3w ———, J. V. Bailey 1.
17-14-2w Lynn, Von Stein & Hagerling 1.
13-13-1w Martin, E. A. Hawley & Rosser 1.
**Pottawatomie County—**
3-8n-4e Kenyon, Tidal Osage Oil 1.
**Caddo County—**
31-6n-9w Abernathy, English Drlg. Co. 4.
33-6n-9w Ester, Briscoe & Hall 1.
1-5n-9w Funk, Cont. Diamond Core Drlg. Co. 1.
**Marshall County—**
24-5s-5e Arbuckle, United Eight Oil 3.

**Wells Drilling and Shut Down**
(Shut down wells indicated by *)

**Harper County—**
14-25-22w Cooper, Hoffer Oil 1.
**Ellis County—**
32-24-24w Meehan, Utility O. & G. 1*.
**Major County—**
36-22-14w Cheyenne Basin, The Texas Company 1*.
36-21-11w Gray, Frantz & Slick 1.
**Woodward County—**
34-20-20w ———, Small & Kennessey 1*.
**Logan County—**
33-19-4w ———, Bryan & Emery 1.
28-18-4w Moore, Franklin Oil Assn. 1*.
33-18-3w Quier, Haley and Pioneer Pet. 1*.
28-16-1w Lair, Blackford O. & G. 1*.
**Dewey County—**
7-18-15w Chronister, Meyers 1*.
8-18-15w Perfect, Huckleby-McCoy 1*.
**Kingfisher County—**
6-16-7w Canfield, Pet. Eng. Core Drill Co. 1.
27-16-6w Sturgeon, McKenna & Crawford 1.
17-15-6w Creaves, Chi Oil & Nicholas 1*.
**Blaine County—**
21-15-10w Eklemier, Okoma Oil 1*.
**Canadian County—**
9-14-6w Piatt, A. D. Spears et al 1*.
34-13-9w Dawson, Thos. Reveile 1.
2-13-8w Setter, Carroll & Zweicher 1*.
29-11-7w Sanders, O. D. Jones 1*.
**Oklahoma County—**
15-14-2w Meyer, Red Seal Ref. 1.
9-14-1w Miller, Maxine Pet. 1.
10-12-3w Edwards, Cromwell O. & G. 1*.
**Texas County—**
32-5n-12e Hovey, Valerius O. & G. 1.
21-4n-14e Hovey, Wilcox O. & G. 1.
18-3n-12e Hughes, Valerius O. & G. 1.
28-3n-13e Dei, Wilcox O. & G. 1.
9-3n-15e ———, Reiter-Foster Oil 1.
4-1n-12e ———, Haley, Garber & Pulse 1.
**Mayes County—**
20-20-20 Longcrier, J. C. Fore and F. R. Shepard 1.
8-20-19 Drew, J. L. Dixon 1.
**McIntosh County—**
2-12-15e McIntosh, Begg O. & G. 1*.
12-11-14 Richards, Tiger Mountain Oil 1.
**Sequoyah County—**
15-11-26 Hicks, Citizens Gas Co. 1.
**Pittsburg County—**
32-9n-16e Smith, J. L. Pattison 1.
8-2n-16e Wilkins, Baker & Hailey 1*.
**Haskell County—**
10-9n-18 Sanders, Marion Oil 1.
**Latimer County—**
7-5n-18e Hunt, P. & F. Pet. 1*.
**Pottawatomie County—**
26-11- 4e Kline, Sikes, Kilgore & Shaffer 1.
12-10- 3e Ives, Sikes, Kilgore & Shaffer 1.
25-10- 4e Madgett, J. W. McCulloch, Inc. 1.
28-10- 4e Toney, Central National Oil 1*.
16-10- 5e School land, Clark Edwards et al 1*.
16-9n- 5e School land, Gypsy Oil 1.
15-7n- 4e Standridge, Darby Pet. 1.
19-7n- 4e Neghan, Croxton & Bucklin 1.
10-6n- 2e McGahey, Davis Detrick et al 1.
20-6n- 4e Hibbard, Croxton Wrightsman et al 1.
**Beckham County—**
24-9n-25w ———, W. H. Sheldon 1.
28-8n-22w McGee, W. R. Duke 1*.
Van Vector, Kadane et al 1*.
**Kiowa County—**
5-6n-18w Bonham, A. C. Varner 1.
6-2s-16w ———, Landfair et al 1.
**Caddo County—**
31-6n- 9w Jones, Briscoe & Hall 1.
29-5n-12w Galbreath, W. J. Hartley 1*.
10-5n- 9w Bigley, Briscoe & Hall 1.
12-5n- 9w Wagner, Gorton Trust Co. 3.
**Tillman County—**
13-1s-18w Snelling, Oasis Oil 1*.
1-5s-15w Riverbed, Tipton et al 1.
**Johnson County—**
26-4s- 5e Chastain, Deese et al 1.
**Atoka County—**
17-4s-11e Dabney, Hanson et al 1*.
**Love County—**
10-6s- 3w Laten, R. M. Boring et al 1.
7-6s- 2e Brown, Magnolia Pet. 1.
28-6s- 2e Fee, Westheimer 1.
**Marshall County—**
17-5s- 5e Sacra, Kennedy Drlg. Co. 1.
21-5s- 5e Sacra, Gill et al 1*.
24-5s- 5e Arbuckle, United Eight Oil 6.
30-5s- 6e Marshall, United Eight Oil 1.
**Nowata County—**
14-25-14e Reed, Prairie O. & G. 1.
Rigs, 15; wells drilling, 68; total, 83.

## KANSAS

**Summary of Wells Completed**

| County— | Comp. | Prod. | Dry | Gas |
|---|---|---|---|---|
| Butler | 23 | 1,900 | 8 | 0 |
| Chautauqua and Elk | 11 | 610 | 2 | 1 |
| Cowley | 11 | 356 | 5 | 1 |
| Greenwood | 84 | 10,874 | 21 | 0 |
| Lyon | 16 | 225 | 13 | 0 |
| Russell | 4 | 405 | 0 | 0 |
| Miscellaneous | 16 | 1,860 | 8 | 2 |
| Total May | 165 | 16,230 | 57 | 4 |
| Total April | 201 | 20,330 | 62 | 12 |
| Difference | 36 | 4,100 | 5 | 8 |

**Summary of Rigs and Wells Drilling**

| County— | Rigs | Drg. | Ttl. |
|---|---|---|---|
| Butler | 10 | 56 | 66 |
| Chautauqua and Elk | 4 | 22 | 26 |
| Cowley | 5 | 33 | 38 |
| Greenwood | 35 | 83 | 118 |
| Kingman | 2 | 12 | 14 |
| Lyon | 11 | 32 | 43 |
| Montgomery | 0 | 13 | 13 |
| Rice | 2 | 11 | 13 |
| Sumner | 1 | 13 | 14 |
| Miscellaneous | 20 | 106 | 126 |
| Total May | 90 | 381 | 471 |
| Total April | 103 | 356 | 459 |
| Difference | 13 | 25 | 12 |

### BUTLER COUNTY

29-25-5e Finney, Empire G. & F. 30.... dry
Finney, Empire G. & F. 32.... 20
27-26-7e Wilhite, White Eagle O. & R. 4 .... 80
27-27-7e Kruse, Amerada Pet. 5 .... 250
31-27-7e Sear, Tidal Oil 1 .... dry
33-27-7e Laughlin, Federal Oil 5 .... 100
29-25-5e Finney, Empire G. & F. 31 .. 10
Stapleton, Empire G. & F. 31 10
35-27-4e Starkey, Empire G. & F. 9 .. 175
27-27-7e Truesdale, Dixie Oil 2 .... dry
28-27-7e Iobe "A", Manhattan Oil 1 .... 150
13-28-6e Lucas, Allison & Fitzwilliams 1 .... 380
14-23-7e De Ford, Ramsey et al 1 .... dry
12-26-7e Kiser, Neeley O. & G. 1 .... dry
19-26-8e Hoge, Leighty & Martin 1 .... dry
35-27-4e Skaer, Empire G. & F. 15 .... 80
5-27-6e Beedles, Branson et al 2 .... dry
33-27-7e Laughlin, Federal Oil 6 .... 110
19-25-5e Pirtle, Empire G. & F. 11 .... dry
32-25-5e Moler, Empire G. & F. 25 .... 10
26-27-4e Safford, Safford et al 7 .... 50
9-27-6e Tatum, Phillips Pet. 1 .... 25
23-27-7e Barnhill, Mid-Kansas Oil 1 .. 450

Wells completed .... 23
Production .... 1900
Dry .... 8

### CHAUTAUQUA & ELK COUNTIES

20-34-9e Borrum, Leighty et al 1 .... 25
12-29-8e Porter, Roth & Co. 14 .... 35
11-30-11 Finley, Manhattan Oil 1 .... dry
13-31-10 Webb, Pure Oil 6 .... 40
21-31-10 Walter, Theta Oil 1 .... 25
14-31-10 Webb, Southwestern Gas Co. 12 .... 75
22-31-10 Rorick, Gillespie 1 .... 180
27-31-10 Walker, Theta Oil 2 .... 200
11-31-10 Glascock, Southwestern Gas 1 dry
27-31-10 Walker, Theta Oil 1 .... 30
36-31-10 Warren, Denman Bros. et al 1 gas

Wells completed .... 11
Production .... 610
Dry .... 2
Gas .... 1
Gas production .... 500,000

### COWLEY COUNTY

10-31-3e Smith, Benedum p& Trees 5 27
24-32-4e Shannon, Gypsy Oil 8 .... 144
4-33-7e Reynolds, Forrester et al 1 20
16-34-3e Chapman, Roxana Pet. 2 .... dry
28-30-8e Ferguson, Hazlett et al 1 .... dry
18-32-5e Serot, Roth & Farout 1 .... dry
18-35-3e Gally, Roxana Pet. 1 .... gas
6-31-6e Eastman, Southwestern Pet. 11 .... 30
24-32-4e Shannon, Gypsy Oil 9 .... 135
15-32-5e Moore, Roth & Farout 1 .... dry
5-33-3e Oles, Marland Oil 1 .... dry

Wells completed .... 11
Production .... 365
Dry .... 5
Gas .... 1
Gas production .... 3,500,000

### GREENWOOD COUNTY

19-22-10 Browning, Sinclair Oil 38 .... 150
29-22-19 Prather, Ttitus et al 3 .... 400
Prather, Titus et al 14 .... 300
14-22-11 Fromme, Empire G. & F. 8 .. 150
15-22-11 Pees, Empire G. & F. 6 .... 27
18-22-11 Clopton, Mid-Cont. Pet. 8 .... 45
Clopton, Mid-Cont. Pet. 9 .... dry
31-22-11 De Malorie "C", York State Oil 2 .... 300
De Malorie "C", York State Oil 3 .... 200
3-22-12 Jeanette, Lamar & Hayne 1 dry
4-22-12 Fankhouser, Fisher, Lauck et al 2 .... 200
Fankhouser, Simmons et al 5 250
27-22-13 Miller, Braden Bros. et al 5 18
25-23-8e Dales "B", Manhattan Oil 10 40
10-23-9e Green, Manhattan Oil 22 .... 75
4-23-11 Yeager, White Eagle O. & R. 1 .... dry
28-23-13 Dehlinger "A", Mid-Cont. Pet. 2 .... 12
1-24-9e Cartwright, Roth, Farout & Mission 10 .... 20
34-24-9e Marshall, Roxana Pet. 7 .... 90
9-25-9e Coulter, Lewis Oil 2 .... dry
12-22-10 Fechter, The Prairie O. & G. 1 .... 702
29-22-10 Prather, Titus et al 20 .... 150
30-22-10 Prather, Titus et al 3 .... 135
5-22-12 Jones, Phillips Pet. 1 .... 20
28-22-12 Fankhouser, Simmons et al 1 dry
25-23-8e Scott, Hayes, Robertson et al 11 .... 50
Scott, Hayes, Robertson et al 12 .... 150
1-23-9e Skelly-Shambaugh, Skelly Oil 3 .... 63
15-23-9e Green, Skelly Oil 2 .... 200
19-23-9e Morris, Empire G. & F. 4 .... 25
Morris, Manhattan Oil 6 .... 40
15-23-10 Burgess, Roth & Farout 1 .... 25
26-23-10 Mason, Pure Oil 7 .... 20
17-24-13 Hinchman, Davis et al 1 .... dry
10-26-8e Hull, Kinney Refg. 7 .... 30
13-26-8e Dunlap, Tom Miller et al 1 dry
7-27-13 Freind, The Prairie O. & G. 1 dry
16-24-13 Blackwell, The Prairie O. & G. 4 .... dry
1-22-10 Fuller, Day et al 1 .... 300
6-22-10 Atyeo, Kanson Oil 3 .... 175
7--22-10 Evans, Miss. Valley Oil 1 .... dry
12-22-10 De Malorie, Davis, Hazlett et al 16 .... 600
De Malorie, Manhattan Oil 6 250
Austin, White Eagle et al 3 150
27-22-10 Brown, Neeley O. & G. 1 .... dry
29-22-10 Prather, The Texas Co. 6 .... 150
Prather, Titus et al 8 .... 250
Prather, Titus et al 13 .... 100
11-22-11 Hind, Empire G. & F. 7 .... 100
14-22-11 Duby, Empire G. & F. 5 .... 117
32-22-11 De Malorie "C", York State Oil 7 .... 300
33-22-11 Hillard, Phillips Pet. 6 .... 150
Westcott, York State Oil 8 .. 150
4-22-12 Fankhouser, Lamar & Hane 1 350
Fankhouser, Simmons et al 4 250
Fankhouser, Simmons et al 8 300
Fankhouser "B", Simmons et al 5 .... 300
9-22-12 Holderman, Terrian & Balliere 1 .... dry
25-23-8e Dales "B", Manhattan Oil 8 dry
2-23-9e Teter, Empire G. & F. 34 .... 75
27-23-10 Thrall "B", Roth, Farout & Manhattan Oil 7 .... 25
29-23-10 Thrall, Roth, Farout & Manhattan Oil 23 .... 30
9-23-11 Tiffany, Simmons et al 3 .... 250
9-23-13 Inthurm, Haverhill Pet. 6 .... 30
30-24-11 Wiggins "C", McGinnis et al 4 .... 200
31-24-13 Cornish, Christy et al 3 .... 100
6-22-10 Atyeo, Empire G. & F. 6 .... 240
14-26-11 Jackson, Smith & Ash 2 .... dry
26-27-8e Lewis, Roth & Farout 1 .... dry
12-22-10 De Malorie, Davis, Hazlett et al 15 .... 460
12-22-10 Austin, Syndicate Oil 3 .... 300
20-22-10 Browning, Sinclair Oil 39 .. 200
11-22-11 Kipfer, Empire G. & F. 12.. 360
28-22-11 Clark, Titus et al 1 .... dry
5-22-12 Chandler, Phillips Pet. 2 .... 10
9-23-9e Noler, Tom Conway et al 1 .. dry
30-24-11 Wiggins "C", McGinnis et al 3 300
32-24-11 Garrison, Polhamus et al 1 .. dry
16-24-13 Blackwell, Rhodes & Abel 4 .. 15
28-25-10 Huntington, Hoy & Starkey 1 dry
35-25-10 Clark, White Oil 2 .... dry
23-26-9e Birkett, Continental Oil 2 .... 25

Wells completed .... 84
Production .... 10874
Dry .... 21

### LYON COUNTY

32-19-11 Roberts, Abel, Finney et al 1 dry
34-21-10 Pixlee, Ritchey & Moore 6 .. dry
33-21-12 Holly, Phillips Pet. 1 .... dry
22-18-12 De Long, Abel, Finney et al 1 dry
33-19-13 Heaton, Balliere et al 1 .... dry
5-20-10 Newman, Buck et al 1 .... dry
19-21-10 Morris, Sheedy et al 1 .... 25
31-21-10 Atyeo, Sheedy et al 5 .... 100

32-21-12 Lauck, Phillips Pet. 9 ..... 100
29-21-13 Sheppard, Phillips Pet. 1 .... dry
25-20-11 Heussen, Miss. Valley Oil 1 .. dry
18-20-12 Slicher, Marland Oil 1 ..... dry
11-21-11 Hathway, Fisher, Lauck & Moore 1 ..... dry
11-17-12 Chatterton, Double A Oil 1 .. dry
23-18-10 Ball, Connell et al 1 ..... dry
4-21-11 Langley, Miss. Valley Oil 1.. dry

Wells completed ..... 16
Production ..... 225
Dry ..... 13

**RUSSELL COUNTY**

5-12-15w Kollman, T. C. Johnson 7 .. 100
5-12-15w Oswald, Mid-West Ref. 16 .. 95
Oswald, Mid-West Ref. 18 .... 150
Oswald, Mid-West Ref. 19 .... 60

Wells completed ..... 4
Production ..... 405

**MISCELLANEOUS COUNTIES**
**COFFEY COUNTY**

1-20-14 Jones, Bucher et al 1 ..... dry
25-22-14 Reed, Peerless Oil 1 ..... dry
8-22-14 Schankie, Derby Oil 1 ..... dry

**MARION COUNTY**

8-19-4e Troup, Troup et al 1 ..... gas
17-21-4e Waner, National Ref. 3 .... dry
24 21-4e Jones, Sheedy et al 1 ..... 400

**SUMNER COUNTY**

24-33-2e Holman, Marland Oil 2 ..... dry

**WILSON COUNTY**

32-30-16 Long, The Prairie O. & G. 17 gas

**WOODSON COUNTY**

23-26-14 Town, Peerless O. & R. 3 .... 350
23-26-14 Louk, Peerless O. & R. 2 .... 400
23-26-14 Town, Peerless O. & R. 2 .... 400
32-23-14 Headley, Pure Oil 14 ..... 30
6-25-14 Louder, Kirk et al 1 ..... dry

**BARTON COUNTY**

22-18-13w Everleigh, John Herron 1 .. dry

**CHASE COUNTY**

14-22-9e Evans, Dingee, Callahan et al 1 ..... dry

**RICE COUNTY**

35-20-6w Miller, The Prairie O. & G. 2 ..... 280

Wells completed ..... 16
Production ..... 1860
Dry ..... 8
Gas ..... 2
Gas production ..... 4,050,000

**BUTLER COUNTY**
**Rigs**

20-23-4e Parris, Ark. River Gas 12.
27-26-7e Young, Empire G. & F. 4.
14-27-5e Zeiset, H. H. Patton 1.
8-27-6e Dedrick, Richmond Drlg. Co. 1.
33-27-6e Shriver, H. H. Patton 1.
22-27-7e Harris, Mid-Kansas Oil 2.
23-27-7e Barnhill, Flack et al 1.
Harris, Mid Kansas Oil 1.
3-28-6e Kramer, Allison & Fitzwilliams 1.
Gibson, The Texas Co. 1.

**Wells Drilling**

12-23-6e Sickles, Phillips Pet. 1.
19-23-8e Sturgeon, Tom Miller et al 1.
31-23-8e Waikins, Manhattan Oil 1.
25-24-6e Daley, Manhattan Oil 1.
29-24-7e Potts, Manhattan Oil 1.
22-25-7e Collins, Liggett et al 1.
9-26-5e Boyer, Empire G. & F. 19.
8-26-6e Kimball, Kismet Oil 1.
32-26-6e Schoenrock, Sparta Drlg. Co. 2.
27-26-7e Wilhite, Connell Oil 3.
Young, Empire G. & F. 8.
Ellsworth, Phillips Pet. 2.
30-26-8e Drum-Bitler, Abel et al 2.
Drum-Bitler, Cowpuncher Oil 3.
25-27-4e Skaer, Magnolia Pet. 4.
2-27-5e Smock "A", Sitran Bros. 1.
33-27-5e Clark, Neeley O. & G. 1.
36-27-6e Figge, Liggett et al 2.
22-27-7e Tobler, Flack, Davidson et al 4.
Barnhill, Sinclair Oil 4.
27-27-7e Kruse, Amerada Pet. 6, 7.
Truesdale, Dixie Oil 3, 4.
Phillips-Kruse, Phillips Pet. 1.
33-27-7e Laughlin, Federal Oil 7, 8.
33-27-7e Laughlin, FederalOil 7, 8.
Laughlin, Lewis Oil 3.
34-27-7e Bateman, Dixie Oil 1.
6-27-8e Lucas, John Rogers 2.
2-28-6e McCollough, Mathews et al 1.
3-28-6e Blackman, Johnson et al 1.
Gibson, Phillips Pet. 1.
Gibson, Shawver & Sutter 1.
13-28-6e McCraig, Farr et al 1.
16-28-6e Cotton, Magnolia Pet. 1.
17-28-6e Pettet, Phillips Pet. 1.
20-28-6e Pettet, Magnolia Pet. 2, 3.
21-28-6e Pettet, Mid Kansas Oil 1.
22-28-6e Pettet, Connell et al 1.
34-28-6e Powell, Manhattan Oil 1.
34-29-4e Burch, Smith, Ash et al 1.
19-29-5e Sutton, Shawver et al 1.
3-29-7e Arnold, Landon et al 1.
17-29-7e Brown, White Eagle et al 1.
33-29-8e Hanna, Roth & Co. 9.

**Shut Down**

30-23-7e Swively, Templeman, Frantz et al 1.
36-24-4e Barkmyer, Robinson et al 1.
29-25-4e Varner, Tatlock & Vickers 1.
24-27-4e Weidline, Weidline et al 1.
7-27-6e Kistler, Gypsy Oil 1.
22-27-7e Truesdale, The Texas Co. 3.
12-29-6e Keneyon, Tobin et al 1.
Rigs 10; wells drilling 56; total 66.

**CHAUTAUQUA AND ELK COUNTIES**
**Rigs**

33-32-11 Burch, Skow Bros. 1.
13-29-8e Hanna, Roth & Co. 10.
17-29-10 Taylor, Ark. Fuel Oil 2.
20-31-11 La Ville, Gillespie 1.

**Wells Drilling**

28-32-10 McAllister, Watchorn O. & G. 3.
31-32-10 McNown, Foster Oil & Harsp & Craven 1.
21-32-11 McCarty, Robinson et al 1.
5-33-9e Garr, Brouck et al 1.
20-34-9e Townsend, Trees Oil 1.
18-29-11 Nuttel, Selby O. & G. Co. 1.
3-30-9 Denton, Watchorn O. & G. 9.
3-30-12 Willard, Theta Oil 2.
15-31-9e Davis, Kansas Central Oil 1.
13-31-10 Webb, Pure Oil 7.
14-31-10 Chaffine, Pure Oil 10.
22-31-10 Rorick, Gillespie 3.
23-31-10 Webb, Theta Oil 1.
33-31-10 Webb, Landon et al 1.
35-31 11 Ayers, Abel, Byington et al 1.

**Shut Down**

11-32-10 Jeaneret, Griffeth-Strueb Oil 1.
7-32-11 Chaffine, Mitchell, Graizer et al 1.
7-33-10 Briggs, Noble Oil 1.
4-29-9e Britton, Tolbot & McCollough 1.
11-29-11 Ebel, Benge et al 1.
19-31-9e Newbecker, Anglo-Texas Oil 2.
29-31-10 Rettig, Neeley Oil 2.
Rigs 4, wells drilling 22; total 26.

**COWLEY COUNTY**
**Rigs**

35-31-3e Wilson, Ark. Fuel Oil 1.
21-31-4e Goodrich, Twin State Oil 1.
7-32-5e Crosby, Ark. Fuel Oil 5.
9-33-3e Graham, Duffield et al 1.
20-34-3e Surtz, Wilt & Shawver 1.

**Wells Drilling**

15-30-4e Neirton, Smith & Ashe 1.
31-30-6e Robbins, Lewis Oil 8.
10-31-3e Shaffer, Benedum & Trees 5.
28-31-4e Lewis, Trees Oil 3.
6-31-6e Eastman, Southwestern Pet. 12.
19-32-3e Carson "A", T. B. Slick 3, 6.
Waite, Carter Oil 9, 10.
15-32-4e School land, J. A. Hull 1.
Wallace, J. A. Hull 15.
25-32-4e McFadden, Buckeye Oil 3.
Lierman, Gypsy Oil 1.
3-32-5e Elrode, Empire G. & F. 3.
18-32-5e Barnette, Gypsy Oil 1.
19-32-5e Boyd, Duffield et al 3.
16-33-3e Hunt, Gypsy Oil 2.
28-33-3e Caldwell, W. Phillips & Marland 12.
36-33-4e Seacat, Roxana Pet. 1.
24-33-6e Sandstrum, Little Martha Oil 2.
7-33-7e Riding, Brown Bros. 1.
18-33-7e Smith, Doric Oil 1.
5-34-3e Martin, Gypsy Oil 1.
16-34-3e Chapman, Roxana Pet. 3.
15-34-4e Pollock, Bunnell et al 1.
16-34-5e Hunt, Phillips Pet. 1.
24-34-6e Day, S. H. E. Pet. 1.
20-34-8e Burkett, Watchorn O. & G. 1.

**Shut Down**

7-30-6e White, Branson et al 1.
14-30-6e Hulmes, Grey, Hewey et al 1.
4-31.5e Elliott, Boxer et al 1.
24-32-4e Lewis, J. A. Hull 3.
5-35-5e Sterling, Springstead & Overlease 1.
Rigs 5, wells drilling 33; total 38.

**GREENWOOD COUNTY**
**Rigs**

1-22-10 Fuller, Day et al 2, 2.
6-22-10 Atyeo, Empire G. & F. 8.
12-22-10 De Malorie, Davis, Hazlett et al 18.
20-22-10 Browning, Sinclair Oil 41, 42.
29-22-10 Prather, Titus et al 19, 25.
11-22-11 Kipfer, Empire G. & F. 13.
19-22-11 Harris, Simmons et al 4.
32-22-11 De Malorie "A", York State Oil 8.
De Malorie "C", York State Oil 11.
4-22-12 Fankhouser "A", Simmons et al 6.
Fankhouser "B", Simmons et al 1.
Fankhouser, The Texas Co. 2.
5-22-12 Lewis, Phillips Pet. 1.
1-23-9e Shambaugh, White Eagle O. & R. 1.
18-23-9e Morris, Paul et al 1.
19-23-9e Morris, Empire G. & F. 5, 8.
23-23-9e Teter Emerald Oil 2.
10-23-10 Smith, Roth, Farout & Phillips Pet. 1.
28-23-10 Thrall, Roth, Farout et al 57.
10-23-11 Riding, Connell et al 1.
17-23-11 McGilvray, Darby et al 1.
10-23-12 Inthurm, Connell Oil 1.
3-23-13 Souder, Theta Oil 13.
15-23-13 Shadel, Mid-Continent Pet. 9.
1-24-9e Cartwright, Roth, Farout & Manhattan Oil 12.
Marshall, Ark. Fuel Oil Co. 15.
30-24-11 Wiggins "D", McGinnis et al 1, 2.
34-24-12 Waldorf, Troxell et al 1.
27-24-13 Storey, Skelly Oil 1.
2-22-10 Bradfield, Syndicate Oil 1.

**Wells Drilling**

1-22-10 Fuller, Syndicate Oil 2.
6-22-10 Atyeo, Empire G. & F. 7.
8-22-10 Pixlee, Theta Oil 10, 11, 12.
9-22-10 Rixlee, Theta Oil 9.
12-22-10 De Malorie, Davis, Hazlett et al 17.
Austin, Syndicate Oil 4.
19-22-10 Browning, Sinclair Oil 40.
20-22-10 Prather "A", Skelly Oil 2.
29-22-10 Prather, The Texas Co. 7, 8.
Prather, Titus et al 4, 18.
15-22-11 Bartlett, Empire G. & F. 5, 6.
18-22-11 Clopton, Simmons et al 2.
32-22-11 O'Neil, York State Oil 9.
4-22-12 Fankhouser, Fisher, Lauck et al 3.
Fankhouser, Mid-Continent Pet. 1.
Fankhouser "A", Simmons et al 7.
Fankhouser "B", Simmons et al 7.
Fankhouser "C", Simmons & The Texas Co. 2, 3.
Fankhouser, The Texas Co. 1.
11-22-12 Young, Shaffer & Howell 1.
24-23-8e Scott "C", Manhattan Oil 2.
25-23-8e Scott, Hayes, Robertson et al, 13, 14.
Craft Taylor, Manhattan Oil 9.
Dales "B", Manhattan Oil 11.
26-23-8e Mosby, Phillips Pet. 4.
10-23-9e Green, Banhattan Oil 23, 24.
11-23-9e Green, McGinnis et al 2.
Green,Sheedy et al 8.
15-23-9e Bradford-Teter, Phillips Pet. 6.
E. Teter, Skelly Oil 6.
19-23-9e Morris, White Eagle et al 7.
23-23-10 Allen, Mid Kansas Oil 27.
4-23-11 Cragen, Phillips Pet. 3.
Yeager, Skelly Oil 2.
8-23-11 Oliver, Pure Oil 3.
26-23-11 Ellis, Simmons & Amerada 2.
3-23-12 Motar, Simmons et al 1.
15-23-13 Shadel, Mid-Continent Pet. 8.
20-23-13 Burris, Ark. Fuel Oil 5.
27-23-13 Schindler, Mission Oil 3.
28-23-13 Dehlinger "A", Mid-Continent Pet. 4, 5.
29-23-13 Dehlinger "B", Mid-Continent Pet. 11.
23-24-10 Edwards, Jno. Edwards et al 1.
19-24-11 Freeman, Phillips Pet. & Manhattan Oil 1.
Lindamood, Ritchey, Moore & White Eagle 2, 5.
30-24-11 Wiggins "C", McGinnis et al 5.
6-24-12 Shock, Syndicate Oil 1.
13-25-8e Welch, Roth & Farout 1.
6-25-9 Oleson, Lassen et al 1.
19-25-9e Ladd, Mid Kansas Oil 14.
20-25-9e Ladd, Mid Kanas Oil 8, 9.
19-25-10 Henley, Elwell et al 1.
23-26-9e Weirshing, Flintridge Pet. 2.
24-26-9e Weirshing, Beacon Oil 4.
27-26-9e Hodgson, Hiatt, Durham et al 1.
7-26-10 Edwards, Swift et al 1.
33-27-9e Beaumont, Roth & Farout 1.
12-22-10 Fechter, The Paririe O. & G. 2, 3.
1-23-9e Shambaugh, The Pairie O. & G. 2.
5-22-12 Ames, The Prairie O. & G. 1.

**Shut Down**

8-22-10 Pixlee, Mid-Kansas Oil 4.
2-22-12 Kussman, Miss. Valley Oil 1.
19-22-13 Bell, Henderson, Holdren et al 1.
3-23-9e Noler, Knight et al 1.
26-24-9e Wiggins, Polhamus et al 4.
25-24-10 Nixon, Davis, O'Flaharty et al 1.
15-24-11 Short, Loy et al 1.
22-26-9e Duke, Smith, Carlson & Marshall 2.
27-26-9e Duke, Smith & Wahn 1.
8-27-10 Neubratch, Morgan et al 1.
2-28-11 Schultz, McCollough et al 1.
Rigs 35, Wells drilling 83; total 118.

**KINGMAN COUNTY**
**Rigs**

34-27-7w Graber, Fleeger et al 2.
11-28-6w Pagett, Marland Oil 1.

**Wells Drilling**

9-27-6w Hemple, Phillips Pet. 1.
15-27-7w Herman, T. B. Slick 1.
16-27-7w Richardson, Carter Oil 2.
25-27-7w Wilkinson, Allison & Fitzwilliams 1.
22-28-5w Linholm, Harwood & Winters 1.
31-28-5w Beshare, Crawford & McKenna 1.
35-28-7w Yoeman, Cassoday Oil 1.
16-28-8w McKenna, Phillips Pet. 1.
4-30-6w Richards, Ozark Drlg. Co. 1.
21-29-9w Schultz, Phillips Pet. 1.
35-30-9w Keiming, Vickers & Stearns 1.

**Shut Down**

13-28-7w Greenleaf, Fleeger et al 1.
Rigs 2, wells drilling 12; total 14.

**LYON COUNTY**
**Rigs**

13-17-12 Burnap, Jones, Wilhite et al 1.
28-17-12 Phillips, Skow Bros. et al 1.
27-18-11 Baker, Markham et al 1.
25-19-10 Bibermyer, Culp et al 1.
7-20-11 James, Wynd & Sinclair Oil 1.
31-21-10 Atyeo, "A", 3, 4.
Atyeo, Sheedy et al 8.
19-21-11 Rossillion, Emerald Oil 1.
29-21-12 Tile, Swartz et al 1.
33-21-12 Lauck, Phillips Pet. 10.

**Wells Drilling**

5-21-10 Ewers Ranch, The Prairie O. & G. 1.
21-16-10 Frontiman, Ramsey et al 1.
6-16-12 Putman, Manhattan Oil 1.
33-17-11 Carr, Wilcox O. & G. 1.
11-18-12 Rednoor, Abel, Finney et al 1.
20-18-13 Price, Double A Oil 1.
21-18-13 Fuller, Watchorn O. & G. 1.
35-19-11 Jones, Wilson et al 1.
11-19-12 Hunter, Derby Oil et al 1.
20-19-12 Brackiman, Denton & Ossenbach 1.
24-20-10 Stilwell, Garden, Staats et al 1.
32-20-10 Flyn, Sheedy et al 1.
22-20-12 Welch, Connell et al 1.
7-21-10 Richards, Sheedy et al 1.
24-21-10 Barginger, McCollough et al 1.
30-21-10 Jones, Theta Oil 1.
Jones, Transcontinental Oil 1.
Atyeo, Transcontinental Oil 3, 4, 5.
31-21-10 Atyeo "A", Transcontinental Oil 1, 2.
Atyeo, Sheedy et al 6, 7.
35-21-10 Voorhees, Southwestern Pet. 1.
31-21-11 Huntsinger, Rhodes, Parkens et al 1.
18-21-12 Welch, Parkining et al 1.
33-21-12 Lauck, Phillips Pet. 11.
35-21-12 French, Phillips Pet. 1.

**Shut Down**

32-18-10 Bender, Ritchey & Moore 1.
5-19-11 Parker, Culp et al 1.
7-20-13 Evains, Haverland et al 1.
Rigs 11, wells drilling 32; total 43.

**MONTGOMERY COUNTY**
**No Rigs**

**Wells Drilling**

9-34-14 Eaton, Gillespie 1.
28-34-14 Owens, Phillips Pet. 1.
12-35-16 Wilson, Tex-O-Kan Oil 1.

**Wells Shut Down**

21-31-14 Faler, Ramler et al 1.
21-32-13 Neiman, Dunn et al 1.
36-32-14 Dryhead, Irish et al 1.
5-32-16 Brinkman, Cowell et al 1.
35-32-16 Wyberger, Bloom et al 1.
29-32-11 Hellum, Earl & Overlease 1.
35 33-16 Felts, Voice & Tabor 1.
4-33-17 Hall, Townsend et al 1.
30-33-17 Bunk, Brown & Wolf 1.
4-35-17 Walker, Gallowye & Roberts 1.
Wells drilling, 13; total, 13.

**RICE COUNTY**
**Rigs**

2-19-10 Hollscher, Sparta Drlg. Co. 1.
11-21-6w Swanson, Youker et al 1.

**Wells Drilling**

2-21-6w Jacobson, United Refg. Co. 1.
Walstein, Phillips Pet. 1.
Walstein, Youker et al 2.
17-21-6w Brothers, Streeter & Stearns 1.
34-20-6w Wood, Prairie O. & G. 1.
35-20-6w Welch, Prairie O. & G. 2, 1.

**Shut Down**

1-19-7w Deed, Pryor & Lockhart 1.
21-20-6w Barnes, Stamey et al 1.
26-20-6w Johnson, Midland Oil 1.
35-20-6w Welch, Wilcox O. & G. 1.
Rigs, 2; wells drilling, 11; Total, 13.

**SUMNER COUNTY**
**Rigs**

18-35-1e Hamilton, Amerada Pet. 1.

**Wells Drilling**

36-30-2w Riner, Cosden O. & G. 1.
25-31-2e Churchill, Roxana Pet. 1.
17-32-2e Miller, W. Phillips and Roxana 1.
9-32-2e Wright, Marland Oil 1.
24-33-2e Holt, Phillips Pet. 3.
Holt, Sinclair Oil 1, 2.
27-34-2e Spain, Marland Oil 1.
Schwartz, Wentz et al 1.
13-35-2w Gilbert, Broadhurst et al 1.
34-34-2e Post, Prairie O. & G. 1.

**Shut Down**

35-31-4w Stewart, Sparta Drlg. Co. 1.
21-33-2e Rutter, Roxana Pet. 1.
Rigs, 1; wells drilling, 13; total, 14.

**MISCELLANEOUS COUNTIES**
**Rigs**

**Chase County—**
15-20-9e Johnson, Phillips Pet. 1.
9-21-8e Sharp, Crandall, Murta et al 1.
36-22-7e Frew, Taylor et al 1.
**Coffey County—**
2-20-13 Milner, Terrian, Balliere et al 1.
25-20-13 Stuart, Connell et al 1.
14-21-13 O'Mears, Ritchey & Moore 1.
36-22-14 Reed, Bennett Oil 1.
2-23-13 Luthi, McDougal et al 1.
29-20-17 Pierson, Connell et al 1.
**Comanche County—**
23-31-18w Starlock, I. M. Rupard et al 1.
**Graham County—**
17-10-24w Barber, Gruin & Shriler 1.
**Harper County—**
22-34-6w Caton, Bu-Vi-Bar Pet. 1.
**Marion County—**
12-20-4e Bixler, Hay & Wells 1.
**Morris County—**
32-14-7e Barber, Kline et al 1.
**Ness County—**
35-16-21w Ryersee, Bell & Sarton 1.
**Osborn County—**
19- 8-13w Bliss, A. H. Krueger 1.
**Pottawatomie County—**
17-9-12e Stewart, Crawford et al 1.
31-9-12e Bratchbar, Crawford et al 1.
**Reno County—**
35-23-7e Nesley, Fleeger & Mid-Kansas Oil 1.
**Woodson County—**
23-26-14 Town, Peerless O. & R. 4.

**Wells Drilling and Shut Down**
(Shut-down wells indicated by *)

**Barber County—**
14-30-12w Kumburg, R. D. Rood et al 1.
30-30-14w Richardson, Skelly Oil et al 1.
35-32-14w Ott, Vickers & Miller 1.
14-34-11w Martin, B. B. Brown et al 1*.
**Barton County—**
17-19-11w Smith, Huffine et al 1.
12-20-13w Ward, Wiley & Everett 1.
**Chase County—**
25-18-6e Lipps, Preston & Pasewalk 1.
16-20-7e Nichols, Vickers Pet. 1.
24-22-8e Eastman, Skelly Oil 1.
36-22-9e Shambaugh, Mid-Kansas Oil 3*.
**Cloud County—**
6- 6-4w Murdock, Concordia O. & P. 1.*
**Coffey County—**
5-19-14 Gaddis, McMahon & Leonard 1.
26-20-13 Kensel, Basom et al 1.
18-21-14 Wilson, Kimbley Pet. 1.
23-21-16 Wade, Scott Creel Oil 1.
**Edwards County—**
7-23-19w Noberwell, Edwards County Pet. 1*.
**Ellsworth County—**
24-14-7w Walker, United Refg. Co. 1.*
6-14-9w Kasper, John Herron et al 1.*
3-16-8e Herman, Wrightsman 1.
**Franklin County—**
19-15-18 Barnhill, Howard et al 1.
17-16-18 Owens, Smith, Thrice & Fisher 1.*
**Geary County—**
18-11-5e Stinford, Kirby & Wright 1.*
9-12-6e Wright, Liberty Texas Oil 1.*
30-13-6e Foster, Liberty Texas Oil 1.*
**Graham County—**
23-8-24w Taxon, Keys Bros. and Marine 1.*
27-8-25w St. John, Gulf Coast Drlg. Co. 1.*
**Harper County—**
28-31-9w Muir, Wakefield et al 1.
19-32-5w Burk, Berry Pet. 1.
**Harvey County—**
27-22-2e Symons, Watchorn O. & G. 1.
**Hodgeman County—**
19-21-22w Frizzell, Spencer & Marconnette 1.
**Jefferson County—**
13-9-19e Edwards, Northern Counties Oil 1.*
**Labette County—**
26-32-17e Wilks, Ark. River Gas Co. 1.*
1-32-20e Thurman, Noble O. & G. 1.*
33-32-20e Burnes, W. C. Willy 1.*
1-33-17e Hornbeck, Cowell et al 1.*
5-35-20e Lipps, Wantland et al 1.*
**Lane County—**
11-18-27w Dickinson, Richards Refg. 1.
**Lincoln County—**
35-10-10w Brown, Red Bank Oil 1.
19-11- 6w Stone, Scott & Collins 1.*
22-11- 6w Lewis, Pope & Powell 1.*
36-13- 7w Paul, United Refg. 1.*
**Logan County—**
14-14-32w Moffet, Coon et al 1.*
**McPherson County—**
3-18-2w Anderson, Fowler et al 1.
29-18-2w Anderson, Waugh & Casey 1.
**Marion County—**
29-19-5e Collins, Frank Allen et al 1.
33-20-5e Wiley, Stewart, Geer et al 1.*
13-21-4e Ryan, Sheedy et al 1.
24-21-4e Allison, Sheedy et al 5.
32-21-4e Equity, Morgan et al 1.*
1-22-3e Colbeck, Cameron Bros. 1.*
17-21-5e Jeffers, Prairie O. & G. 17.
**Mitchell County—**
10-7-10w Kyle, Marland Oil 1.
**Morris County—**
18-16-5e Rogers, Derby Oil 1.
21-17-7e Welcher, Bowmand & Jones 1.*
24-17-9e Cessman, Rock Creek Oil 1.*
**Nemaha County—**
19-3-11e Myers, Nemaha O. & G. 1.*
**Osborn County—**
10-7-12w Turner, Beasley 1.*
9-10-14w Beeley, Knight et al 1.*
**Osage County—**
3-15-15e Lease, Barber et al 1.*
27-15-16e Baley, West et al 1.*
8-17-17e Neil, Mull Vit Dev. 1.*
**Phillips County—**
15-5-16w McQueen, Curtis & Frost 1.
13-5-18w McKinley, Phillips Pet. and Prairie 1.
**Pottawatomie County—**
11-10-12e St. Mary, Crawford et al 1.*
**Reno County—**
10-23-4w Magnuson, Sheldon et al 1.*
36-24-7w Pexroad, Miss. Valley Oil 1.
9-25-7w High, Cassoday Oil 1.
5-26-4w Williams, Travis et al 1.*
30-26-6w Demoret, Tatlock et al 1.
7-26-7w Stevens, Hopper et al 1.
**Riley County—**
26-10-6e Marks, Pawnee O. & G. 1.
20-10-7e Thierer, Youker & Douglas 1.*
**Rooks County—**
7- 8-20w Saindon, Keys Pet. 1.*
25-10-19w Minx, Findless et al 1.*
**Rush County—**
10-18-16w Moore, Morgan & Downing 1.*
**Russell County—**
13-11-13w Pospishal, Krueger et al 1.
32-11-15w Dodge, Derby Oil et al 3.
32-11-15w Booth, Snowden & McSweeney 3.
17-12-15w Munsell, Valerius O. & G. 2.
Oswald-Valerius, Valerius O. & G. 17, 18.
18-12-15w Mermis, Valerius O. & G. 1.
30-12-15w Austin, Mid-West Refg. 1.
**Saline County—**
29-14-2w Davis, L. S. Johnson et al 1.
26-15-2w Shallion, Brown & Woodward 1.*
15-15-4w Holquest, Thrall et al 1.*
**Sedgwick County—**
6-25-1e Poff, Boyle, Tack & Preston 1.*
9-25-2e Harrison, Smith & Keller 1.*
34-26-1e Jaden, Wichita O. & G. 1.*
7-26-*2e Mills, Lamson et al 1.
7-27-1e Custer, Chastain & Chastain 1.
17-29-1e Howell, Carr, Hartman & Skaer 1.
2-29-2e Fleming, Higgins 1.*
**Stafford County—**
23-21-11w Sifers, King & Lanston 1.*
24-22-11w Richardson, Randall & Johnson 1.*
**Wabaunsee County—**
15-13-12e Henderson, Williams et al 1.*
29-14-11 Young, White Drlg. Co. 1.
**Wallace County—**
12-13-39w Wufkuler, J. Allen Harvey 1*.
**Wilson County—**
22-28-13e Thompson, Price et al 1.*
29-30-17e Smally, West & Williams 1.*
**Woodson County—**
6-24-14e Wintersheld, Pure Oil 16.
9-25-14 Stephenson, Fields, Cross et al 1.
13-25-14 Hunt, Alters et al 1.*
19-25-15 Lewis, Blevens et al 1.
13-26-14 Daniels, Burford & Brimm 1.*
24-26-14 Lauber, McCullough et al 1.
Rigs, 20; wells drilling, 106; total, 126.

# NORTH CENTRAL TEXAS

### Summary of Wells Completed

| County— | Comp. | Prod. | Dry | Gas |
|---|---|---|---|---|
| Hutchinson | 38 | 32,325 | 0 | 0 |
| Carson | 4 | 575 | 1 | 1 |
| Gray | 2 | 67 | 0 | 0 |
| Potter | 1 | 0 | 0 | 1 |
| Collingsworth | 1 | 0 | 1 | 0 |
| Roberts | 1 | 0 | 1 | 0 |
| Wheeler | 1 | 0 | 1 | 0 |
| Wichita | 83 | 587 | 47 | 0 |
| Wilbarger | 40 | 3,926 | 9 | 1 |
| Archer | 167 | 4,026 | 83 | 0 |
| Montague | 22 | 1,436 | 2 | 0 |
| Clay | 5 | 105 | 2 | 1 |
| Baylor | 2 | 60 | 4 | 0 |
| Hall | 1 | 0 | 1 | 0 |
| Jack | 5 | 42 | 4 | 0 |
| Young | 49 | 2,136 | 19 | 0 |
| Stephens | 19 | 482 | 6 | 3 |
| Shackelford | 19 | 6,957 | 9 | 0 |
| Eastland | 12 | 387 | 7 | 1 |
| Callahan | 9 | 525 | 5 | 1 |
| Coleman | 20 | 1,434 | 13 | 0 |
| Brown | 88 | 4,841 | 39 | 0 |
| Mitchell | 6 | 269 | 2 | 0 |
| Howard | 2 | 68 | 0 | 0 |
| Sterling | 2 | 0 | 2 | 0 |
| Reagan | 4 | 4,338 | 1 | 0 |
| Crockett | 5 | 382 | 1 | 0 |
| Upton | 7 | 421 | 2 | 0 |
| Crane | 2 | 90 | 1 | 0 |
| Pecos | 2 | 0 | 2 | 0 |
| Glasscock | 1 | 0 | 1 | 0 |
| El Paso | 1 | 0 | 1 | 0 |
| Comanche | 1 | 0 | 1 | 0 |
| Jones | 1 | 0 | 1 | 0 |
| Throckmorton | 3 | 48 | 2 | 0 |
| Concho | 1 | 0 | 1 | 0 |
| Total May | 630 | 65,527 | 272 | 9 |
| Total April | 387 | 33,287 | 139 | 12 |
| Difference | 243 | 32,240 | 133 | 3 |

### Summary of Wells Drilling

| County— | Rigs | Drg. | S.D. | Ttl. |
|---|---|---|---|---|
| Wichita | 3 | 27 | 14 | 44 |
| Wilbarger | 18 | 79 | 14 | 111 |
| Archer | 15 | 53 | 8 | 76 |
| Young | 11 | 10 | 9 | 30 |
| Stephens | 5 | 44 | 12 | 61 |
| Eastland | 2 | 26 | 8 | 36 |
| Brown | 19 | 75 | 25 | 119 |
| Coleman | 12 | 24 | 9 | 45 |
| Callahan | 4 | 22 | 5 | 31 |
| Mitchell | 4 | 11 | 2 | 17 |
| Shackelford | 5 | 28 | 8 | 41 |
| Montague | 5 | 18 | 3 | 26 |
| Throckmorton | 3 | 13 | 3 | 19 |
| Upton | 11 | 6 | 6 | 23 |
| Crane | 3 | 5 | 2 | 10 |
| Crockett | 2 | 17 | 5 | 24 |
| Reagan | 3 | 32 | 3 | 38 |
| Hutchinson | 96 | 138 | 10 | 244 |
| Carson | 11 | 18 | 2 | 31 |
| Miscellaneous | 33 | 79 | 56 | 168 |
| Total May | 265 | 725 | 204 | 1,194 |
| Total April | 168 | 859 | 0 | 1,027 |
| Difference | 97 | 134 | 204 | 167 |

### ARCHER COUNTY

L. F. Wilson, L. T. Burns 1 (Sec. 63) dry
McCrory, trustee, F. H. Gohlke 1 . . 12
Parrish et al, Humble Oil & Ref. Co. 10 15
Prescott, Maer & Staniforth 1 . . . . dry
H. W. Preston, Riner & Bailey 1 . . . . dry
R. L. Sloop, Sorsfield & Maxwell 1 . . dry
Rachuig, Camp O. & G. & Atlantic O. P. 1 . . . . 10
McCarty, Flowers et al 1 . . . . dry
Richardson, Hammond & Hines 1 . . 25
Connor, Ted Harris et al 1 . . . . dry
Hamilton, Humble Oil & Ref. Co. 8 . . 60
Wolf, Humble Oil & Ref. Co. . . . 80
Prideaux, Ilseng Prod. Co. 2 (Blk. 16) 35
Coffield, Pandem Oil Corp. 1 . . . . dry
Prideaux, Shaw & Rathke 1 . . . . 51
Brown, Sun Oil Co. 1 . . . . 400
Jeske, The Texas Company 9 . . . . 58
Jeske, The Texas Company 10 . . . . 267
Richardson, The Texas Company 8 . . . . 138
Wright, The Texas Company 1 . . . . 20
Abercrombie, Texhoma Oil & Ref. 2 . . dry
Wolfe "B," Texhoma Oil & Ref. 4 . . dry
Terrell, Tidal Oil Co. 1 . . . . dry
Perkins, G. S. Anderson 5 . . . . abd
Jackson, L. T. Burns 3 . . . . 40
W. H. Taylor, Consolidated Oil Co. and W. C. Young 1 . . . . dry
G. W. Moss, Hart & Hopkins 1 . . . . 12
A. D. Thompson "B", M. L. Lewis et al 1 . . . . 40
L. F. Wilson "H", T. G. Lomax, Jr. 2 . . dry
May Rutty "B", Magnolia Pet. Co. 4 . . 50
L. F. Wilson, McCarty Oil Co. 18 . . . . 30
L. F. Wilson "B", McCarty Oil Co. 24 . . 12
J. M. Hawley, Muse & Robertson et al 1 dry
May Rutty, T. A. Norwood et al 2 . . abd
L. F. Wilson Lot 1, Ramming & Saunders 1 . . . . dry
Hutcheson, Rowe Drilling Co. 1 . . . . dry
S. M. Cowan, estate, Simms Oil & Consolidated 1 . . . . dry
H. K. Dycus, The Texas Company 1 . . dry
Hamilton, Texhoma Oil & Ref. Co. 9 . . 142
W. N. Miller, V. O. E. Wright et al 4 . . 7
Cowan estate, R. I. Carter 5 . . . . dry
Oldham "A", J. S. Cosden & Consolidated 6 . . . . dry
Oldham "B", Cosden & Consolidated 4 dry
Oldham "C", Cosden & Consolidated 1 . . 5
Richardson, Cosden & Consolidated 1 . dry
Andrews, H. Donohue 1 . . . . 15
Echols, Gwynn et al 1 . . . . dry
Wolf, Humble Oil & Ref. Co. 5 . . . . dry
Prideaux, Ilseng Prod. Co. 4 (Blk. 15) 10
McCarty, Maer & Staniforth 2 . . . . dry
Rogers, Magnolia Pet. Co. 8 . . . . 20
Kovar, Prairie Oil & Gas and Sun Oil Co. 3 . . . . 3
Key, The Texas Company 1 . . . . dry
Abercrombie & Taylor, Texhoma Oil & Ref. Co. 3 . . . . dry
Fee, Trinity Townsite Co. 3 . . . . 50
L. F. Wilson, Barkley & Meadows 24 . . 20
W. T. Hutcheson, Bridwell, Heydrick, Lincoln & Hutcheson 1 . . . . dry
McCrory, trustee, "C", L. T. Burns 1 . . dry
W. T. Hutcheson, W. D. Hill et al 6 . . dry
W. R. Brown, Howell & Barkley 1 . . . . 30
Parrish et al "A", Humble Oil & Ref. Co. 6 . . . . 20
L. F. Wilson "B", McCarty Oil Co. 25 . . 25
S. M. Cowan estate, McDonald et al 1 . . dry
Parrish et al "A", Texhoma Oil & Ref. Co. 4 . . . . dry
McCrory, trustee, Wanderer Oil Co. and Staley & Wynne 1 . . . . dry
L. F. Wilson "A", Woodburn Corp. 26 45
Oldham, Atlantic Oil Prod. Co. 3 . . . . 120
Hamilton, Bridwell & Heydrick 1 . . . . dry
Oldham "B", Cosden & Consolidated 5 dry
Hamilton, Humble Oil & Ref. Co. 9 . . . . dry
Wolf, Humble Oil & Ref. Co. 3 . . . . 10
Wolf, Humble Oil & Ref. Co. 5 . . . . dry
Wolf, Humble Oil & Ref. Co. 6 . . . . 15
Little, Magnolia Pet. Co. 1 . . . . 80
Hilton, Prairie Oil & Gas Co. 1 . . . . dry
Meade estate "A", Shasta Oil et al 1 . . 63
Jeske, The Texas Company 11 . . . . 15
Jeske, The Texas Company 12 . . . . dry
Wolf, Texas-Consolidated 3 . . . . dry
Abercrombie & Taylor, Texhoma Oil & Ref. Co. 6 . . . . 180
Wolf "A", Texhoma Oil & Ref. Co. 7 . . 28
Oldham, Texhoma Oil & Ref. Co. and Republic Prod. Co. 3 . . . . 30
Young, Verschoyle et al 3 . . . . dry
A. P. Jackson, L. T. Burns 4 . . . . 70
L. F. Wilson "F", Dale Oil Corp. 4 . . . . dry
Ferguson, Darr & Hill 1 . . . . 3
W. R. Brown, Howell & Barkley 1 . . . . 45
A. P. Nichols, Humble O. & R. Co. 2 dry
L. F. Wilson "C", King, Corlett & White 7 . . . . dry
McCrory, trustee, "K", T. G. Lomax, Jr. 1 . . . . dry
Mangold, Munsle & Consolidated Oil Co. 1 . . . . dry
Oil Inv. Co. "B", Oil Inv. Co. 1 . . . . dry
Kemp & Kempner, Panhandle Ref. Co. & Rayzor 1 . . . . dry
B. Z. Lyles, Fred Phillips et al 1 . . . . dry
T. J. Moss, Riner & Bailey 1 . . . . dry
L. F. Wilson "B", Shaw et al 4 . . . . 33
Turbeville "A", Simms Oil Co. 1 . . . . dry
Mangold, Tidal Oil Co. 1 . . . . dry
Kemp & Kempner "B", Wilson Drlg. Co. 5 . . . . 25
Wolf, C. U. Beasley 2 . . . . 80
Rachuig "A", Camp. O. & G. and Atlantic Oil Prod. Co. 5 . . . . 35
Oldham, Consolidated Oil Co. et al 2 . . dry
Rogers, Continental Oil Co. 7 . . . . dry
Ward, Creath & Medders 1 . . . . dry
O'Donnell, Golding & Cochran 1 . . . . dry
Richardson, Hammond & Hines 2 . . . . dry
Robinson, Hopper & Graves 1 . . . . dry
Walsh, Hunter & Seigler 1 . . . . dry
Wolf, Independent Oil & Gas Co. 4 . . dry
Anderson, Perkins et al 14 . . . . dry
Scruggs, Prairie Oil & Gas Co. 7 . . . . dry
Brown, Sun Oil Co. 2 . . . . 10
Kunkel, Texhoma Oil & Ref. Co. 1 . . . . 14
Kunkel, Texhoma Oil & Ref. Co. 2 . . . . 35
J. L. Anderson "B", Gulf Prod. Co. 1 . . dry
M. W. Jackson, Gulf Prod. Co. 9 . . . . 63
B. R. Jeske, Gulf Prod. Co. 6 . . . . 60
A. P. Nichols, Gulf Prod. Co. 36 . . . . 35
Howard Bank Co., Gulf Prod. Co. 7 . . . . 50
B. R. Jeske, Gulf Prod. Co. 5 . . . . 30
M. W. Jackson "A", Gulf Prod. Co. 8 . . 102
Kell-Kempner "A", Gulf Prod. Co. 1 . . dry
L. W. McCrory, trustee, "C", Gulf Prod. Co. 7 . . . . 9
A. P. Nichols, Gulf Prod. Co. 32 . . . . dry
A. P. Nichols, Gulf Prod. Co. 33 . . . . 30
A. P. Nichols, Gulf Prod. Co. 35 . . . . 67
Power Banking Co., Gulf Prod. Co. 6 . . 100
T. B. Wilson, Gulf Prod. Co. 5 . . . . dry
M. W. Jackson et al "A", Gulf Prod. Co. 7 . . . . 60
B. R. Jeske, Gulf Prod. Co. 2 . . . . 115
B. R. Jeske, Gulf Prod. Co. 3 . . . . 6
B. R. Jeske, Gulf Prod. Co. 4 . . . . 90
A. P. Nichols, Gulf Prod. Co. 34 . . . . 50
H. L. Ward et al, Gulf Prod. Co. 2 . . . . dry
L. F. Wilson, Barkley & Meadows 25 . . 15
A. P. Jackson, L. T. Burns 5 . . . . 75
Plowman et al, Empire Gas & Fuel Co. 1 . . . . dry
L. F. Wilson, Humble O. & R. Co. 7 40
L. F. Wilson "D", Humble O. & R. Co. 2 . . . . 15
J. H. White, A. W. Kollatt 5 . . . . dry
P. A. Newell, C. B. Long 1 . . . . dry
J. M. Miller, Magnolia Pet. Co. 1 . . . . dry
Perkins et al, Marland Oil Co. and Trahan 1 . . . . dry
L. F. Wilson, McCarty Oil Co. 19 . . . . 35
L. F. Wilson "B", McCarty Oil Co. 26 30
L. F. Wilson "A", Shappell Oil Co. 2, 3 dry
Hamilton, Texhoma Oil & Ref. Co. 10 73
L. L. Marcell, White Eagle Oil & Ref. Co. 2 . . . . 20
Henry Ford, F. S. Whitman et al 1 . . . . dry
W. N. Miller, V. O. E. Wright et al 5 . . 8
L. F. Wilson "A", Woodburn Oil Corp. 27 . . . . 5
Cowan estate, Roy I. Carter 6 . . . . dry
J. D. Bridwell et al, Cook & Reeder 1 . . 17
Herron, Cosden-Consolidated Co. 1 . . . . dry
Richardson, Hines et al 1 . . . . dry
H. O. Prideaux, Lewis Oil Corp. 1 . . . . 25
Schlegel, Madden et al 1 . . . . dry
Darilek, Magnolia Pet. Co. 2 . . . . dry
Rogers, Magnolia Pet. Co. 15 . . . . 90
Kunkel, Petroleum Prod. Co. 1 . . . . 8
Meade estate, Shasta Oil Co. 1 . . . . 10
Abercrombie, Simms, Hammond & Hines 1 . . . . dry
Cowan estate, E. L. Smith 13 . . . . 10
Brown, Sun Oil Co. 3 . . . . 30
Kunkel, Sun Oil Co. 6 . . . . dry
Prideaux "B", United Prod. Co. 1 . . . . 15
Inmon et al, Whittiken et al 1 . . . . dry
Completions . . . . 167
Production . . . . 4,026
Dry . . . . 83

### COMPLETIONS
### HUTCHISON COUNTY

Whittenburg, American Ref. Co., 1 . . 50
Whittenburg, Dunnigan et al., 1 . . . . 1,000
Smith, Lenix and Pattison, 1 . . . . 5,859
Smith, Phillips Pet., 3 . . . . 242
Johnson, Phillips Pet. Co., et al., 1 . . 1,600
Kingsland, Travelers Oil, 1. . . . . 180
Smith, McIlroy Bros. et al., 3 . . . . 450
Whittenburg, Phillips Pet., Gibson Oil Corp. and McMillan 1 . . . . 500
Smith, W. H. Holmes, 1 . . . . 192
Smith, McMan O. & G., 3 . . . . 506
Weatherly, J. R. Phillips, 1 . . . . 65
Johnson Bros., Phillips Pet. Co., et al., 1 . . . . 1,600
Smith, Phillips Pet. Co., 4 . . . . 200
Johnson, White Eagle O. & R., 1 . . . . 600
Whittenburg, Gulf Prod. Co., 2 . . . . 830
Dial, Gulf Prod. Co., 6 . . . . 1,600
Lewis, Badger Oil Co., 1 . . . . 200
Kingsland, Gates Oil Corp., 2 . . . . 240
Whittenburg, Skelly Oil Co., 2 . . . . 230
J. A. Whittenburg, Smith & Bynum, 1 . . 90
Smith, Spring Creek Oil Co., 1 . . . . 1,350
Kingsland, Canadian River Oil, 2 . . . . 50
Kingsland, Canadian River Oil, 3 . . . . 40
Whittenburg, Canyon Oil and Gas, 3 . . 4,500
Smith, Currie Bros. and Phillips, 1 . . . . 4,500
Kingsland, Gates Oil Corp., 1 . . . . 60
Johnson, Phillips Pet and Pulaski, 1 . . 57
Smith-Capers, White Eagle O. & R., 1 . . 2,000
Whittenburg, Phillips Pet. & Parks 2 . . 800
Whittenburg Phillips Pet. & Gibson, 2 . . 210
Johnson, Phillips Pet. Williams, 1 (M. Whitley Sur.) . . . . 688
Smith, Phillips Pet., 4 (Sec. 5, Bk. Y) . . . . 200
Whittenburg, Phillips Pet. 2 (12-Y) . . . . 410
Weatherly, Prairie O. & G., 2 (M. Whitley) . . . . 30
Johnson, Skelly Oil, 1 (M. Whitley) . . . . 600
Whittenburg, Skelly Oil (Sec. 22) . . . . 65
Dial et al., Gulf Prod. Co., 7 . . . . 165
Dial et al., Gulf Prod. Co., 8 . . . . 375
Wells completed . . . . 38
Production . . . . 32,325

### CARSON COUNTY

Burnett Est., Marland Oil Co., 1 . . . . 500
Bivins, "B", Amarillo Oil Co., 3 . . . . 75
Burnett Est., J. S. Cosdon, 1 . . . . gas
Burnett Est., B. S. Barnes, 1 (Sec. 65 Bk. 5) . . . . Abd.
Wells completed . . . . 4
Production . . . . 575
Dry . . . . 1
Gas . . . . 1
Gas production . . . . 50,000,000

### GRAY COUNTY

Heithholt, Empire Gas & Fuel Co., 1 . . 15
W. J. Brown, The Texas Co., 1 . . . . 52
Completions . . . . 2
Production . . . . 67

### POTTER COUNTY

Lee Bivins, Prairie Oil & Gas. Co., 1 . . gas
Completions . . . . 1
Gas . . . . 1
Gas production . . . . 20,000,000

### COLLINGSWORTH COUNTY

Hughes Est., Continental Oil Co., et al., 1 . . . . dry
Completions . . . . 1
Dry . . . . 1

### ROBERTS COUNTY

Mrs. Ledrick & Sons, Phil Engle 1 . . dry
Completions . . . . 1
Dry . . . . 1

### WHEELER COUNTY

Kachelhoffer, McFarland & Thomas, 1 dry
Completions . . . . 1
Dry . . . . 1

### WICHITA COUNTY

Chilson, Fisher & Gilliland, 1 . . . . dry
Dutton, United Prod. & Pet. Prod., 1 . . dry
Dutton "A", Simms Oil, 1 . . . . 25
Dutton "A", Simms Oil, 2 . . . . dry
Waggoner "G", Atlantic O. P. Co., 1 . . dry
Jennings, Dale Oil Corp., 21 . . . . dry
Ramming "B", Magnolia Pet. Co., 21 . . dry
Chilson, W. B. Omohundro, 4 . . . . dry
Powell, Panhandle Ref. Co., 1 . . . . dry
Allen & Kemp "B", Petroleum Prod. Co., 21 . . . . dry
Bywaters, Red River Oil Co., 21 . . . . 1
Chilson, Blk. 21, Stump & Co., 1 . . . . 15
Burnett M., Texhoma O. & R., 6 . . . . dry
G. Jennings, "A", Gulf Prod. Co., 16 . . 50
Completions . . . . 83
Production . . . . 587
Dry . . . . 47

### WILBARBER COUNTY

Bond, Barkley and Meadows, 1 . . . . dry
Stephens, Empire Gas and Fuel, 18 . . 200
Stephens, Empire Gas and Fuel, 30 . . 120
Stephens, Empire Gas and Fuel, 36 . . 75
Waggoner, J. B. Garretson, 1 . . . . dry
Waggoner, Independent O. & G., 1 . . dry
Waggoner "B", Milham Corp. 2 . . . . 200
Waggoner "L", Milham Corp., 2 . . . . 200
Ditto, Murchison and Pigg, 3 . . . . abd.
Waggoner "G", Phillips Pet. Co., 6 . . 200
Waggoner "A", Waggoner Ref. Co., 1 . . 300
McGill, G. C. Wood, 1 . . . . dry
Castlebury, Castlebury Farm Oil Co. 8 dry
Waggoner "H", Humble O. & R., 8 . . 60
Waggoner "H", Humble O. & R. Co. 9 . . 35
Waggoner "H", Milham Corp., 2 . . . . dry
Waggoner "H", Milham Corp. 5 . . . . 35
Waggoner "H", Milham Corp. 7 . . . . 155
Waggoner "L", Milham Corp., 6 . . . . 455
Waggoner "G", Phillips Pet. Co., 5 . . 50
Waggoner "QQ" Phillips Pet. Co., 2 . . 270
Stephens, Humble O & R., 46 . . . . gas
Waggoner "G", Phillips Pet. Co., 4 . . 30
Waggoner "PP" Phillips Pet. Co. 1 . . 35
Waggoner "B", Prairie Oil & Gas Co. 2 20
Stephens, Bridwell and Heydrick, 13 abd.
Castleberry, W. G. Burton, 3 . . . . 3
Stephens, Empire Gas and Fuel Co., 33 130
Waggoner "M", Humble Oil & Ref. Co. 6 . . . . 102
Waggoner "O", Humble Oil and Ref. Co., 5 . . . . 230
Waggoner, E. B. Lawson, 14 . . . . dry
Waggoner "Q", Phillips Pet. Co., 2 . . 24
Stephens, Empire Gas and Fuel Co. 31 25
Stephens, Humble O. & R. Co., 44 . . 150
Waggoner "M", Humble O. & R. Co. 4 . . 250
Piper, Magnolia Pet. Co. 49 . . . . 11
Waggoner "G", Phillips Pet. Co., 7 . . 200
Waggoner "I", Phillips Pet. Co., 3 . . 30
Waggoner "QQ", Phillips Pet. Co., 3 . . 210
Waggoner "A", Roxana Pet. Corp., 7 . . 121
Wells completed . . . . 40
Production . . . . 3,926
Dry . . . . 9
Gas . . . . 1
Gas production . . . . 2,250,000

### MONTAGUE COUNTY

R. Hinds, Lesh, McCall & Kilcrease 2 . . 60
Rowland et al "A", Texhoma O. & R. Co. 6 . . . . 60
Hinds, Benton-Woods et al 6 . . . . 60
Hinds, F. H. E. Oil Co. 3 . . . . 125
Hinds, Humble O. & R. Co. 1 . . . . 70
Rowland et al "A", Texhoma O. & R. Co. 7 . . . . 58
Oldham et al, The Texas Company 6 . . 130
Hinds, F. H. E. Oil Co. 4 . . . . 63
R. Hinds, Lesh, McCall & Kilcrease 3 . . 75
N. J. Howard et al "A", Texhoma O. & R. Co. 3 . . . . 36
Rowland et al "A", Texhoma O. & R. Co. 8 . . . . 130
R. W. Cunningham, Gulf Prod. Co. 5 . . 8
R. W. Cunningham, Gulf Prod. Co. 4 . . 92
R. W. Cunningham, Gulf Prod. Co. 2 . . 50
R. Hinds, Benton Woods et al 7 . . . . 40
R. Hinds, Humble O. & R. Co. 2 . . . . 103
J. B. Gist, Owenwood Oil Corp. 1 . . . . dry
J. W. Maddox "A", Pure Oil Co. 3 . . . . 40
N. J. Howard, The Texas Company 1 . . dry
Cunningham, The Texas Company 2 . . 65
J. B. Oldham et al, The Texas Company 7 . . . . 96
R. Hinds, Texhoma O. & R. Co. 4 . . . . 75
Completions . . . . 22
Production . . . . 1,436
Dry . . . . 2

### CLAY COUNTY

H. H. Johnson, Knox Finley 1 . . . . 90
Withers Subd., Lone Star Gas Co. 5 . . gas
Holloway, Lone Star Gas Co.'s No. 19 . . dry
M. K. Inman, Howard Pet. Co. et al 1 dry
R. M. Waggoner, Winnipeg Oil Co. 1 . . 15
Completions . . . . 5
Production . . . . 105
Dry . . . . 2
Gas . . . . 1
Gas Production . . . . 500,000

### BAYLOR COUNTY

Sykora, Pandem Oil Corp. 1 . . . . dry
Cockrell, W. J. Green 1 . . . . dry
Stevens, T. L. Head et al 1 . . . . dry
Portwood, Magnolia Pet. Co. 6 . . . . 60
Young "C", Pandem Oil Corp. 1 . . . . dry
Completions . . . . 5
Production . . . . 60
Dry . . . . 4

### HALL COUNTY

T. R. Fuston, Hudspeth & Taylor 1 . . . . dry
Completion . . . . 1
Dry . . . . 1

### JACK COUNTY

Gay, Washington Oil Co. 1 . . . . dry
Bloodworth, Jordan et al 1 . . . . dry
Snedeker, Baytex Oil Co. 1 . . . . 42
Rankin, Murchison & Fain 1 . . . . dry
Sloan, Richardson & Markley 1 . . . . dry
Completions . . . . 5
Production . . . . 42
Dry . . . . 4

### YOUNG COUNTY

Rachuig "B", Atlantic O. P. Co. 2 . . . . 90
Farmer, Bridwell & Heydrick 5 . . . . 7
Street, Bridwell & Heydrick 6 . . . . dry
Benson, R. I. Carter 7 . . . . 125
Leath, Clark et al 2 . . . . 25
Winkler, Gwynn et al 1 . . . . dry
Stewart, Howard Pet. Co. 1 . . . . 100
Farrow, Plains Prod. Co. 2 . . . . dry
Williams "B", Nash & Windfohr Oil Co. 3 . . . . 75
Rachuig "B", Atlantic O. P. Co. 1 . . . . 100
Graham, Booth Oil Co. 2 . . . . 24
Benson, R. I. Carter 8 . . . . 110
Keen, Cook & Reeder 1 . . . . dry
Mercer, Humble Oil & Ref. Co. 11 . . . . dry
Cox, Humble O. & R. Co. 1 . . . . dry
Campbell "C", Murchison & Fain and Marland Oil Co. 2 . . . . dry
Beardon, Bridwell & Heydrick 2 . . . . 110
Beardon, Bridwell & Heydrick 3 . . . . 15

Street, Bridwell & Mayfield 7 ..... dry
Hoffman, Goza Oil Co. et al 1 ..... dry
Stewart, Howard Pet. Co. 2 ..... 80
Mercer, Humble O. & R. Co. 12 ..... 125
Snyder, McElreath & Suggett and Phillips Pet. Co. 1 ..... 8
Campbell "E", Murchison & Fain and Marland Oil Co. 3 ..... dry
Boren, Prairie O. & G. Co. 6 ..... 25
Beardon, The Texas Company 9 ..... 10
Hunt, Hubbard Drlg. Co. 1 ..... dry
Wergess, Nash & Windfohr Oil Co. 1 .. 15
Goldston & Burkett, Simms Oil Co. 1 .. 25
Benson, R. L. Carter 9 ..... 10
Leberman, Christie & Graham 1 ..... dry
Leath, Clark et al 3 ..... dry
Sloan, Ilseng Prod. Co. 1 ..... dry
McCaghren, Long et al 2 ..... 125
Grugg, Reed & Anderson 2 ..... dry
R. Campbell "A", Gulf Prod. Co. 7 ... 7½
W. E. Edwards, Gulf Prod. Co. 1 ..... dry
Rachuig "B", Atlantic Oil Prod. Co. 3 . 100
Rogers, Barkley et al 1 ..... 150
Beardon, Bridwell & Heydrick 4 ..... dry
Beardon, Bridwell & Heydrick 5 ..... 85
Williams, Bridwell & Mayfield 1 ..... 15
Rachuig, Chenault & Lea 1 ..... 450
Stewart, Howard Pet. Co. 3 ..... 30
Stewart, Howard Pet. Co. 4 ..... 20
Stewart, Howard, Duffield & Berlin 1 . 25
Mercer, Humble O. & R. Co. 13 ..... 50
Wallace, Stafford & Hayes 1 ..... dry
Belknap Coal Co., Whitehead et al 2 . dry

Completions ..... 49
Production ..... 2,136½
Dry ..... 19

### STEPHENS COUNTY

Yoes, Humble O. & R. 2 ..... dry
Curry, The Texas Co. 12 ..... gas
Martin, Texas Consolidated Oil 7 ..... 40
Gratz, Federal Oil Co. 1 ..... dry
Curry, Hanlon Gasoline Co. 2 ..... gas
Binney, Texas Pacific C. & O. Co. 64 .. 80
Bradford, Barnhart et al 1 ..... gas
Bruce, Price & Russell 2 ..... 50
Winston "B", Texas Pacific C. & O. 3 40
Crowley, Eidson et al 4 ..... 8
Head, Mook-Texas Oil Co. 4 ..... dry
Keathley, Walker-Caldwell Prod. Co. 1 dry
R. Davis, Tr. "D," Gulf Prod. Co. 9-G. 1 40
J. M. Ward "C," Gulf Prod. Co. 30 ... 130
R. T. Hopper et al, Gulf Prod. Co. 4... dry
Bell, McDonald 3 ..... 25
Post, Eidson et al 2 ..... 50
Curry, Hanlon Gasoline Co. 1 ..... dry
J. A. Stoker "D," Gulf Prod. Co. 14 ... 19

Wells completed ..... 19
Production ..... 482
Dry ..... 6
Gas ..... 3
Gas production ..... 32,500,000

### SHACKELFORD COUNTY

Matthews, Dunbar et al 1 ..... dry
Cook "B," Roser & Pendleton 1 (Sec. 85) ..... 1800
Cook "A," Roeser & Pendleton and Marland Oil Co. 4 (Sec. 84) ..... 400
Cook "A," Roeser & Pendleton and Marland Oil Co. 3 (Sec. 85) ..... dry
Cook "A," Roeser & Pendleton and Marland Oil Co. 4 (Sec. 85) ..... 1000
Cook "A", Roeser & Pendleton and Marland Oil Co. 5 (Sec. 84) ..... 800
Cook "A," Roeser & Pendleton and Marland Oil Co. 9 (Sec. 84) ..... 500
Cook "A," Roeser & Pendleton and Marland Oil Co. 5 (Sec. 85) ..... 540
Cook "B," Roeser & Pendleton 2 (Sec. 85) ..... 1754
Myrick, Simms Oil Co. 1 ..... dry
Black Bros., Buckeye Pipe & Supply 1. dry
Elliott, Dunigan et al 2 ..... 7
Walker, McCurdy et al 1 ..... dry
Colbert, Richardson Bros. 1 ..... dry
Davis, Hope Pet. Co., Ladd & Hannon 1 96
Elliott, Kimmel & Dillard 1 ..... dry
Clark, Milham Corp. 1 ..... dry
Proctor, Carter et al 2 ..... dry
Matthews, Engle Bros. 2 ..... 12
Stevens, Overlees 1 ..... 48

Wells completed ..... 19
Production ..... 6957
Dry ..... 9
Gas ..... 0
Gas production ..... 0

### EASTLAND COUNTY

Brelsford, Prairie Oil & Gas Co. 2 .... dry
Brasheur, Robert Oil Corp. 1 ..... dry
Brunett, Goodwin & White 1 ..... dry
Casey, Lobough et al 1 ..... dry
Cooper, Corzelius Bros. 1 ..... dry
Poe, Corzelius Bros. et al 1 ..... dry
Harris, Magnolia Pet. Co. 10 ..... 50
Scott, Teatsworth et al 9 ..... 15
Parsons "A," Gulf Prod. Co. 1 ..... 247
Armstrong heirs, Eastland Oil Co. 1 ... dry
Mulloy, Bateman & Campbell 1 ..... 75
L. Kinnebrew, Gulf Prod. Co. 7 ..... gas

Wells completed ..... 12
Production ..... 387
Dry ..... 7
Gas ..... 1
Gas production ..... 2,000,000

### CALLAHAN COUNTY

Derrington, Canyon Oil & Gas Co. 1 ... 100
Barr, Canyon Oil & Gas Co. 4 ..... 15
Baum, Mook-Texas Oil Co. 1 ..... gas
Conlee, Halmack Oil & Pennant O. & G. 1 ..... dry
Brashear, C. O. Moore 1 ..... dry
Finley, Moutray Oil & Reiter-Foster 2. dry
Derrington, Canyon O. & G. 2 ..... 410
Atchley & Crane, Redmond 1 ..... dry
Long, Roeser & Pendleton 1 ..... dry

Wells completed ..... 9
Production ..... 525
Dry ..... 5
Gas ..... 1
Gas production ..... 1,000,000

### COLEMAN COUNTY

Vaughn, Evans et al 1 ..... 5
Overall, Raney et al 1 ..... dry
Walker, Evans & Wakefield 1 ..... dry
Dibrell, Independent O. & G. 1 ..... 409
Whitfield, Gillespie et al 1 ..... dry
Haygood, Ross & O'Connor 1 ..... dry
Morris, French & Lewis 1 ..... dry
Young Bros., Morrison & St. John 2 .. dry
Morris, C. O. Moore 1 ..... dry
Baker, Owen & Sloan 1 ..... dry
Helton, Superior Oil Co. 1 ..... dry
Dibrell, White Eagle O. & R. 1 ..... 100
Star, Howard Wright 1 ..... dry
Dibrell, Burke-Greis Oil and Gwinnup 3 40
Dibrell, Burke-Greis Oil and Gwinnup 5 400
Dibrell, Independent O. & G. Co. 2 .... 380
Dibrell, Kirby Pet. Co. 1 ..... 100
Overall, Mahlstedt Oil Co. 1 ..... dry
Kinney, Merry Bros. & Perini 1 ..... dry
Casey, White Eagle O. & R. Co. 1 ..... dry

Wells completed ..... 20
Production ..... 1434
Dry ..... 13

### BROWN COUNTY

Williams, Anderson & McCamey 1 .... dry
Prather "A," Barbour Oil 4 ..... 10
Dunn, Barkley & Co. 8 ..... 25
Chambers, Conway Bros. 6 ..... 250
Westerman, Cosden 7 ..... 100
Westerman, Cosden 8 ..... dry
Williams "A," Cosden ..... 75
Gaines, Hepburn Oil 2 ..... 6
Eubanks, Mahlstedt Oil 1 ..... dry
Gaines, Prairie O. & G. 14 ..... 50
Newton, Prairie O. & G. 6 ..... dry
Allen "C," States Oil Corp. 2 ..... dry
Allen "C," States Oil Corp. 3 ..... dry
Gaines, Arkansas Fuel Co. 1 ..... dry
Allgood, Anderson & Shults 1 ..... dry
Suttles, Barbour Oil 1 ..... 40
Dunn, Barkley & Conway 7 ..... 100
Westerman, J. S. Cosden 9 ..... 375
Cason, Denny 1 ..... dry
Newton, Gillespie 3 ..... 200
Thompson, Gilliman & McMurray 4 .... 75
Dunn, Humble Oil & Ref. 9 ..... dry
Mauldin, Hutton et al 1 ..... dry
Allen, McCarter et al 2 ..... 100
Allen, McCarter et al 4 ..... 220
Newton, Mulloy & Chandler 1 ..... dry
Suttles, Root 1 ..... 35
Dunn, E. L. Smith 3 ..... 25
Dunn, E. L. Smith 4 ..... dry
Dunn, The Texas Company 6 ..... 400
Dunn, The Texas Company 7 ..... 150
Dunn, The Texas Company 8 ..... 180
Anderson, Treat & Co. 1 ..... dry
Dunn, Barkley & Conway 6 ..... 100
Windham, Brit 1 ..... dry
Wooldridge, Conway Bros. 4 ..... 20
Arledge, Hughes Dev. Co. 4 ..... 10
Arledge, Hughes Dev. Co. 6 ..... 100
Newton, Rocky River Oil 2 ..... dry
Gaines, Simms Oil 7 ..... dry
Dunn, E. L. Smith Oil Co. 11 ..... dry
Graham, E. L. Smith Oil Co. 1 ..... dry
Allen "C," States Oil Corp. 5 ..... dry
Dunn, The Texas Company 9 ..... 100
Keller, Williamson et al 1 ..... 75
Dunn, Barkley & Conway 10 ..... 60
Byrd, Blair & Kell 2 ..... 100
Pickett, Conway Bros. 6 ..... dry
Pickett, Conway Bros. 7 ..... dry
Eubanks, Evans et al 1 ..... dry
Gunn, Gunn Prod. Co. 7 ..... 35
Prather, Herring 2 ..... dry
Arledge, Hughes Dev. Co. 5 ..... 600
Dunn, Humble Oil & Ref. 8 ..... dry
Dunn, Humble Oil & Ref. 10 ..... 10
Dunn, Humble Oil & Ref. 11 ..... 5
Hodnett, Humble Oil & Ref. 2 ..... 10
Hickman, Kone Pet. (formerly Ballard & Underwood) 1 ..... dry
Edington, Milham Corp. 1 ..... dry
Cason & Grantham, Mitcham & Taylor 1 ..... dry
Westerman, Pandem Oil Corp. 1 ..... 100
Dunn, Phillips Pet. Co. 2 ..... 100
Prather, Schaffner & Wilson 9 ..... 20
Allen "C," States Oil Corp. 4 ..... dry
Dunn, The Texas Company 10 ..... 125
Newton, West and H-Y Oil Co. 3 ..... 100
Clark, C. O. Moore 2 ..... dry
McIntosh, C. O. Moore 1 ..... dry
Newton, Barbour Oil Co. 1 ..... dry
Byrd, Blair & Kell 3 ..... dry
Byrd, Blair & Kell 4 ..... 15
Williams "A," J. S. Cosden 1 ..... 40
Williams "A," J. S. Cosden 2 ..... 40
Williams, J. S. Cosden 2 ..... 35
Prather, Curry & Moore 1 ..... dry
Butler, Fagg et al 1 ..... 10
Moore, Gilman & McMurray 7 ..... 35
Wood, Hickey et al 1 ..... dry
Arledge, J. K. Hughes Dev. Co. 8 ..... 175
Allen, McCarter et al 6 ..... 100
Leatherwood, McCarter et al 8 ..... dry
A. J. Wooldridge "A," McLester Oil Co. 2 ..... dry
W. M. Wooldridge, McLester Oil Co. 4. 150
Suttles, Midwest Exploration Co. 1 .... 25
Lewis, Shadbolt & Creighton 1 ..... dry
Dunn, The Texas Company 11 ..... 60
Dunn, The Texas Company 12 ..... 70
J. Wooldridge, Wilson 1 ..... dry

Wells completed ..... 88
Production ..... 4841
Dry ..... 39

### MITCHELL COUNTY

Handley, Eastland Oil Co. 1 ..... 25
Shumaker, Marland Oil Co. 1 ..... dry
C. M. Adams, Magnolia Pet. Co. 3 ..... 90
C. M. Adams, lease 2, The California Co. 2 ..... 62
Ellwood, Mid-Kansas O. & G. Co. 1 ... dry
Womack, The California Co. 4 ..... 93

Wells completed ..... 6
Production ..... 269
Dry ..... 2

### HOWARD COUNTY

Chalk, Owens & Sloan 1 ..... 38
O'Daniel, Marland Oil Co. 1 ..... 30

Wells completed ..... 2
Production ..... 68
Dry ..... 0

### SCURRY COUNTY

Towle, Morrison & Fairchild 1 ..... abd

### STERLING COUNTY

Durham, Chicago-Texas O. & G. 1 .... dry
C. Collins, Wrightsman Pet. Co. 1 ..... dry

Wells completed ..... 2
Dry ..... 2

### REAGAN COUNTY

University, Big Lake Oil Co. 65 ..... 2908
University, Big Lake Oil Co. 63 ..... 1080
Cole, Marland Oil Co. 1 ..... dry
University, Group 1, Texon O. & L. Co. 1-B ..... 350

Wells completed ..... 4
Production ..... 4338
Dry ..... 1

### CROCKETT COUNTY

P. J. Sorg, Humble O. & R. Co. 1 ..... 10
University, Humphreys Oil Corp. 1 .... dry
Powell, Cromwell et al 2 ..... 217
Powell, Roxana Pet. Corp. 1 ..... 130
Powell, Gulf Prod. Co. 1-A ..... 25

### UPTON COUNTY

Benton Land Co., Marland Oil Co. 1 .. 37
Burleson, Marland Oil Co. 2 ..... 60
Burleson, Marland Oil Co. 3 ..... 238
Keith, F. P. Zoch et al 1 ..... 76
Ruhman, E. P. Zoch et al 1 ..... dry
Union Land Co., F. P. Zoch et al 1 .... dry
Sanger Bros., Marland Oil Co. 2 ..... 10

Wells completed ..... 7
Production ..... 421
Dry ..... 2

### CRANE COUNTY

Cowden Bros., Marland Oil Co. 1 ..... dry
University, Magnolia Pet. Co. 1 ..... 90

Wells completed ..... 2
Production ..... 90
Dry ..... 1

### PECOS COUNTY

Devlin, Tom Adams Oil Co. 2 ..... dry
Bennett, Trans-Pecos Oil Co. 2 ..... dry

Wells completed ..... 2
Dry ..... 2

### GLASSCOCK COUNTY

Neal, Marland Oil Co. 1 ..... dry

### EL PASO COUNTY

Fee, Burns & King 4 ..... dry

### COMANCHE COUNTY

Powers, Milham Corp. 1 ..... dry

### JONES COUNTY

Alexander, Red Bank Oil Co. 1 ..... dry

### THROCKMORTON COUNTY

Cummings, Associated Pet. Co. 3 ..... dry
Kelley, Associated Pet. Co. 2 ..... dry
Ledbetter, Humble Oil & Ref. Co. 1 ... 48

### CONCHO COUNTY

Schultz, Dutton et al 1 ..... dry

### WICHITA COUNTY

**Rigs**

Pierce, Empire Gas & Fuel 18.
Peeler, Magnolia Pet. Co. 4.
G. Jennings "A," Gulf Prod. Co. 17.

**Wells Drilling**

H. Willis, Dr. Bailey et al 1°, 2°.
F. P. Warren, Cozy Oil Co. 10°, 11°, 12°.
J. E. Roller, Humble O. & R. Co. 1, 2.
Saunders estate, Humble Oil & Ref. Co. 1°.
R. L. Miller, H. M. Long et al 1°.
Reilly, Magnolia Pet. Co. 129.
F. P. Warren, Magnolia Pet. Co. 10.
O. C. Beach, Magnolia Pet. Co. 14.
H. Beach, Texhoma O. & R. and Magnolia Pet. Co. 1-A°.
J. L. Bryan, Tenbrink & Rowe 1.
Jennings, "B," Apple & Brandeberry 6.
Snow, Beaudoin A-1°.
Jennings "B," Bullington, Lee & Pendleton 1.
Waggoner Bros., Culberson Co. 38.
Burnett, Dale et al 11°.
Jennings, L. P. Hammond 4.
Marshall, Hawkins, Hester et al 1.
Saunders, Haslett, Simmons 1.
Allingham "A," Hereford Oil Co. 2°.
Burnett, Joe Howell 6.
Burnett "E," Humble O. & R. Co. 4.
Hines, Humble O. & R. Co. 5.
Mitchell-Waggoner, Humble O. & R. Co. 5.
Pratt "A," Magnolia Pet. Co. 17.
B. Ramming, Magnolia Pet. Co. 1.
B. Ramming "A," Magnolia Pet. Co. 20.
Saunders, John O'Neil 7.
Edgerly, Pece 1.
Jennings, Panhandle & McClure 4°.
Bywaters, Red River Oil Co. 86°.
Henson, Ryan Pet. Co. 3.
Nance, Ryan Pet. Co. 63.
Fisher, Schlaffke et al 4.
McCarty "A," Shappel Oil Co. 8.
Sheldon, Sheldon 1°.
Fisher, Simmons Oil Corp. 1-A.

### WILBARGER COUNTY

**Rigs**

Stephens, Empire Gas & Fuel Co. 42, 43, 44.
Stephens, Humble O. & R. Co. 48, 49.
Waggoner "O," Humble O. & R. Co. 9.
Waggoner "I," Phillips Pet. Co. 4.
Waggoner "L," Phillips Pet. Co. 2.
Waggoner "R," Phillips Pet. Co. 1.
Waggoner "Y," Phillips et. Co. 1.
Waggoner "HH," Phillips Pet. Co. 2.
Waggoner "PP," Phillips Pet. Co. 2.
Waggoner "QQ," Phillips et. Co. 6.
Waggoner "UU," Phillips Pet. Co. 1.
Waggoner "WW," Phillips Pet. Co. 1.
Guyer, Stewart et al 1.

**Wells Drilling**

Allison, J. B. Alford Oil Co. 1°.
Sigler-Waggoner, Atlantic Oil Prod. Co. 4°.
Stephens "A," Barkley & Meadows 10°, 12.
Waggoner, F. A. Beatty 2.
Waggoner, Bob Brewer 1.
Waggoner, Bridwell & Heydrick et al 1.
Waggoner, Burton 1°.
Stephens, Empire Gas & Fuel Co. 37, 38, 39, 40, 41.
Bond "B," Humble O. & R. Co. 5°.
Castlebury, Humble O. & R. Co. 24.
Chauncey & Gambill, Humble O. & R. Co. 1.
Chauncey & Gambill, Humble O. & R. Co. 1.
Stephens, Humble O. & R. Co. 45.
Waggoner "G," Humble O. & R. Co. 6.
Waggoner "H," Humble O. & R. Co. 10, 11, 12°, 13.
Waggoner "K," Humble O. & R. Co. 2, 4, 5.
Waggoner "M," Humble O. & R. Co. 7, 8, 9, 10.
Waggoner "N," Humble O. & R. Co. 2.
Waggoner "O," Humble O. & R. Co. 6, 7, 8.
Waggoner "R," Gulf Prod. Co. 5.
Waggoner, Kelly et al 1°.
Waggoner, E. B. Lawson 15.
Fee, Magnolia Pet. Co. 72.
Sumner, Magnolia Pet. Co. 53.
More Waggoner, Magnolia Pet. Co. 2.
Waggoner "A," Milham Corp. 3.
Waggoner "B," Milham Corp. 1, 3, 4.
Waggoner "D," Milham Corp. 1.
Waggoner "H," Milham Corp 1, 10.
Waggoner "J," Milham Corp. 1.
Waggoner "L," Milham Corp. 7, 14.
Waggoner, Miller Oil Co. 2°, 3.
Streit, Murchison & Fain 1.
Dill "B," Petroleum Prod. Co. 3.
Waggoner "A," Phillips Pet. Co. 8, 9, 10, 11, 12.
Waggoner "D," Phillips Pet. Co. 7.
Waggoner "F," Phillips Pet. Co. 9.
Waggoner "G," Phillips Pet. Co. 8, 9.
Waggoner "H," Phillips Pet. Co. 5.
Waggoner "Q," Phillips Pet. Co. 3.
Waggoner "T," Phillips Pet. Co. 1, 2.
Waggoner "JJ," Phillips Pet. Co. 1, 2.
Waggoner "NN," Phillips Pet. Co. 4, 5.
Waggoner "QQ," Phillips Pet. Co. 4, 5.
Waggoner "AAA," Phillips Pet. Co. 1.
Woodward, Plost et al 1°.
Castlebury, Powers et al 1°.
Waggoner "A," Prairie O. & G. Co. 3.
Kemp, Quincy Oil Co. 2.
Section 19, Rio Bravo Oil Co. 1.
Waggoner "B," Rondeau 1.
Waggoner "C," Rondeau 1.
Waggoner "A," Roxana Pet. Corp. 8.
Waggoner "C," Roxana Pet. Corp. 2.
Waggoner "D," Roxana Pet. Corp. 1.
Waggoner "B," Shamrock Oil Co. 1°.
Castlebury, Shipley 1°.
Waggoner, Shipley 1°.
Waggoner, Sloan 2.
Guggisberg, The Texas Company 1.
Zipperle, Texhoma O. & R. Co. 2.
Waggoner, lease 3, Tidal Oil Co. 1.
Waggoner "A," Waggoner Ref. Co. 2.
Zipperle, H. W. Weir 1.
Milner, Whitehead et al 1.
Waggoner, Whitehead et al 1.
Waggoner (Sec. 48), Winnipeg Oil Co. 1.
Haney, Wood 1.

### ARCHER COUNTY

**Rigs**

C. Star, J. D. Ashcraft et al 1.
Plowman et al, Stewart Dev. Co. 8.
Wolf, Barnsdall Oil Co. 1.
Porter, Camp O. & G. Co. 1.
Longley estate, Dale Oil Corp. 1.
Matlock, Hopper & Graves 2.
Rogers, Magnolia Pet. Co. 16.
Jeske, Ray & Massie 1.
Abercrombie, Roxana Pet. Corp. 2.
Matlock, Shaw & Rathke 2.
Cowan estate (Clark), E. L. Smith Oil Co. 4.
Deitrich, Sun Oil Co. 2.
Longley estate, Texas Fidelity Corp. 1.
Parkey, Tidal Oil Co. 1.
B. R. Jeske, Gulf Prod. Co. 8.

**Wells Drilling**

G. B. Hasson, Allday Oil Co. et al 1.
A. P. Jackson, L. T. Burns 7.
A. P. Jackson, McCrory, tr., L. T. Burns A. 1-D.
W. M. Coleman, Rex Cannon et al 1°.
A. D. Thompson, E. E. Clair & Camp O. & G. 1.
A. P. Jackson, J. A. Gardner et al 1.
A. J. Evans, Garry Oil Co. 1°.
A. B. Edwards, C. L. Granberry et al 1.
A. P. Jackson, Humble O. & R. Co. 1.
A. P. Nichols, Humble O. & R. Co. 3.
May Rutty, Magnolia Pet. Co. 5-B.
L. F. Wilson, McCarty Oil Co. 20, 27-B.
A. D. Britton, Pandem Oil Corp. 1.
G. T. Netherton, Richardson Oil Corp. 1.
L. F. Wilson, Shappell Oil Co. (No. 2) 4-A.
L. F. Wilson, Shaw et al 5-B.
A. D. Thompson, Tidal Oil Co. 1.
L. F. Wilson, Wanderer Oil Co. and Humble O. & R. Co. 1°.
L. L. Marcell, White Eagle O. & R. Co. 3.
Henry Ford, F. S. Whitman et al 2.
Stehlik, Arco Oil Co. 2.
Murrah, Grace Oil Co. 1°.
Mangold, Shasta Oil Co. 13.
Demgen, Texhoma O. & R. Co.
L. W. McCrory, tr. "C," Gulf Prod. Co. 8.
A. P. Nichols, Gulf Ford. Co. 38.
Rachuig, Camp O. & G. and Atlantic O. P. Co. 6-A.
Meade estate, Dale Oil Corp. 1.
Andrews, Homer Donohue 2.
Rogers, Fisher & Gilliland 10°.
McCarty, Flowers & Winters 1.
Herron, Golding & Cochran 1.
H. O. Prideaux, Golding, Cochran & Cline 1.
R. O. Prideaux, Golding, Cochran & Cline 1.
Wilhelm, Hines et al 1.
Matlock, Hopper & Graves 2.
Hamilton, Humble O. & R. Co. 10.
Cross, Maer & Staniforth 1.
Coffield, Magnolia Pet. Co. 2.
Lauster, Magnolia Pet. Co. 2.
Little, Magnolia Pet. Co. 2.
Young et al, Murchison & Fain 1.
Thomas, Pandem Oil Corp. 1.
Kunkel, Petroleum Prod. 2.
R. O. Prideaux, Plains Prod. Co. 1.
Prideaux, Pitts et al 1°.
Richardson, Prairie O. & G. Co. 7.
Wilhelm, E. A. Reilly 1°.
Abercrombie, Roxana Pet. Corp. 1.
Meade estate, Shasta Oil Co. 1-B.
Prideaux, (Blk. 23), Shaw & Rathke 2.
Jeske, The Texas Company 8.
Prideaux, The Texas Company 4.
Richardson, The Texas Company 12.
Hemmerling, Texas Consolidated Oil Co. 1.
Abercrombie, Texhoma O. & R. Co. 7.
Kunkel, Texhoma O. & R. Co. 3.
Oldham, Texhoma O. & R. and Republic Prod. Co. 4.
Darilek, Trio Prod. Co. 1.
R. O. Prideaux, United Producers 1.
Prideaux, United Producers 2-A°.

### MONTAGUE COUNTY

**Rigs**

N. M. Flint et al, Farmers Creek Oil Co. 1.
J. W. Maddox, N. Harris and H. R. Simons 1.
Cunningham, Jamison et al 2.
Steadman, Universal Oil Co. 1.
R. W. Cunningham, Gulf Prod. Co. 8.

**Wells Drilling**

R. Hinds, Benton-Woods et al 8.
Converns, Commercial Pet. Co. 1°.
R. Hinds, F. H. E. Oil Co. 5.
Salmon et al, F. H. E. Oil Co. 2.
R. Hinds, Humble O. & R. Co. 3, 4, 5.
J. W. Maddox, Humble O. & R. Co. 1°.
Cunningham, Jamison et al 1.
R. Hinds, Lesh, McCall & Gilcrease 4.
J. W. Maddox, Pure Oil Co. 4.
Gist, The Texas Company 7-A, 8-A.
J. W. Maddox, The Texas Company 1-B.
R. Hinds, Texhoma O. & R. Co. 5, 6.
N. J. Howard et al, Texhoma O. & R. Co. 4-A.
J. W. Rowland et al, Texhoma O. & R. Co. 9-A.
Boedecker, Grigsby Oil Co. 1°.
R. W. Cunningham, Gulf Prod. Co. 6, 7.

### YOUNG COUNTY

**Rigs**

Rachuig, Atlantic Oil Prod. Co. 4-B.
Rogers, Barclay et al 2, 3.
Whitehead, Bridwell & Heydrick 1.
Rachuig, Chenault & Lea 2.
Benson, Cosden Consolidated Oil Co. 4.
Stewart, Howard, Duffield & Berlin 2.
Snyder, McElreath, Suggett and Phillips Pet. Co. 2.
Stewart, J. J. Moran 1.
Whitehead, Pois & Weaver 1.
Dailey, Stafford & Hayes 1.

**Wells Drilling**

Stewart, Appleby et al 1°.
Benson, Roy I. Carter 10, 11.
Steen, Casey et al 1°.
Stewart, J. R. Cole, Jr., 1.
Cheeves, Eagle Creek Oil Co. 2.
Stewart, Lowery et al 1.
Speer, Newbery & Foster 1°.
Howard, Pandem Oil Corp. 1.
Stewart, Ramming & Saunders 1.
Beardon, Wilson et al 8.
Blackman, H. T. Wolf 1.
Donnell, Atkinson & Sandeford 1°.
Costello Bros., Dyer et al 1°.
Harrison, Hubbard Drilling Co. 1.
Griffin, Humphreys Oil Corp. 1°.
Donnell, Liner Drilling Co. 1°.

XUM

Donnell, McQuain et al 1*.
Corbett, Phillips Pet. Co. 2*.

**THROCKMORTON COUNTY**

**Rigs**

Elliott, Red Bank Oil Co. 2.
Parrott, Reiter-Foster Oil Corp. 2.
A. J. Lee, Reiter-Foster Oil Corp. 1.

**Wells Drilling**

Overcash, Humble O. & R. Co. 1*.
Stubblefield, Humble O. & R. Co. 1.
Elliott, Red Bank Oil Co. 1.
Parrott, Red Bank Oil Co. 2, 3.
Elliott, Reiter-Foster Oil Corp. 1, 2.
Parrott, Reiter-Foster Oil Corp. 1, 3.
Stubblefield, Reiter-Foster Oil Corp. 2.
Reynolds Cattle Co., Associated Pet. Co. 3*.
Upshur Co. School Lands, Bridwell & Heydrick 1.
Mrs. M. E. Ledbetter, Humble O. & R. Co. 1.
Stevens, Humble O. & R. Co. 1*.
Tuton, Humble O. & R. Co. 1.
R. H. Brown "B," Gulf Prod. Co. 1.

**SHACKELFORD COUNTY**

**Rigs**

Newell, French & Lewis 1.
Cook, Humble O. & R. Co. 4.
Cannon, Melton Oil Corp. 1.
Cook (Sec. 84), Roeser & Pendleton and Marland Oil Co. 2-A.
Poindexter, Spoonts et al 1.

**Wells Drilling**

Cook, Amerada Pet. 1*.
Burns, Cady 1*.
Parrish, Conley et al 1*.
Colbert, Domestic Oil Co. 1*.
Owens, Gilliam & Logan 1*.
Reynolds, Heck et al 2.
Poindexter, Hope Pet. Co. 1.
Moberly, Hughes Dev. Co. 1*.
Cook, Humble O. & R. Co. 2, 3, 5.
Flippen, Humble O. & R. Co. 1.
Flippen, Jackson 1.
Midkiff, Magnolia Pet. Co. 1.
Moberly, Magnolia Pet. Co. 1.
Edwards, Milton Oil Corp. 1.
Casey, Milham Corp. 2.
Sedwick, Milham Corp. 1.
Wilie estate, Milham Corp. 1.
Snyder, Moutray Oil Co. 3-B.
Lynch, Phillips Pet. Co. 9.
Colbert, Richardson Bros. 1.
King, Richardson Bros. 1.
Davis, Robert Oil Corp. 1.
Cook (Sec. 81), Roeser & Pendleton & Marland 1-A.
Cook (Sec. 84), Roeser & Pendleton 1-B.
Cook, (Sec. 85), Roeser & Pendleton and Marland Oil Co. 2-A, 6-A, 11-A, 12-A.
Cook (Sec. 85), Roeser & Pendleton 3-B, 7-B, 8-B.
Simpson, Texas Unity Oil Co. 1*.
Matthews, Wells et al 1.
Dodson, White Bros. 1.

**STEPHENS COUNTY**

**Rigs**

Richardson, Humble O. & R. Co. 1.
Morrison, Mid-Tex Oil Co. 2.
Vick, Atkinson & Sandefer 1.
Satterfield heirs, Chastain & Donley 1.
Post, Eidson et al 3.

**Wells Drilling**

Hamil, Humble O. & R. Co. 1.
Coody, Kendridge Oil Co. 1*.
Vick, Law et al 1.
G. W. Hill (Acct. 1), Mid-Kansas Oil & Gas Co. 14.
G. W. Hill (Acct. 2), Mid-Kansas Oil & Gas Co. 4, 18.
S. H. Hill, Mid-Kansas Oil & Gas Co. 10.
Lee, Mid-Kansas Oil & Gas Co. 1.
Richardson, Mid-Kansas Oil & Gas Co. 2.
Cunningham, Mid-Tex Oil Co. 5, 6.
Morrison, Mid-Tex Oil Co. 3.
Vick, Mid-Tex Oil Co. 1
Martin, Pennok Oil Co. 8*.
Knox, Republic Prod. Co. 7.
Crowley, Rhodes & Higher 4.
Cobb, Swensondale Oil Corp 8*.
Echols, Swensondale Oil Corp 1-B.
Bradford, Adamson & Fouts 1, 2*.
Compton, Bateman & Campbell 1.
Akin, Brown & Co. 1.
Norvell, Brown & Co. 1.
Hodges, Chestnut & Smith 1.
Goforth, Corzelius Bros. et al 1*.
McCauley, Herbert Oil Corp. 1.
Parks, Hickok Prod. Co. 2.
Gandy, Hucony Gas Co. 5.
Long, Hucony Gas Co. 1*.
Brown, Humble O. & R. Co. 1.
Houston, Humble O. & R. Co. 1.
Grimes, Kleinfelder 4.
Sikes, Lauderdale & Enes 1.
Christenson, Livingston et al 1.
Chesley, Meredith & Thomas 1*.
Glasscock, Meyer & Kramer 1.
Elder, Pender Prod. Co. 2*.
Clark, Pender Prod. Co. 2*.
Akin, Phillips Pet. Co. 2.
Moon, Producers Union Oil Co. 1*.
Nolan, Provident Oil Co. 1*.
Tolle et al, Reeves & Meredith 1.
Thorp, Robert Oil Corp. 1*.
Rush, Roeser & Pendleton 1.
Ming, Scanlon & Lightfoot 1.
Swenson, Swensondale Oil Co. 32.
Taylor, Swensondale Oil Co. 1.
Binney, Texas Pacific C. & O. Co. 63, 65.
Hancock, Texas Pacific C. & O. Co. 1.
Veale, Texas Pacific C. & O. Co. 11.
Curry, The Texas Company 2.
A. M. Fincher, Gulf Prod. Co. 13.
B. F. Satterwhite, Gulf Prod. Co. 3.
J. D. Ward "D," Gulf Prod. Co. 3.
S. E. Beyer "A," Gulf Prod. Co. 2.

**EASTLAND COUNTY**

**Rigs**

Wright, Lewis et al 1.
Motes, Parsons et al 4.

**Wells Drilling**

Garrett, Corzelius Bros. 1.
Fox, Evnas et al 1.
Tucker, Fort Ring O. & G. 1.
Blackwell, Kirk & Brewer 1.
Wood, Kokomo Pet. Co. 1.
Downtain, Lewis et al 1, Allen estate, Lightfoot et al 3*.
Ford, Magnolia Pet. Co. B-1.
Ross, Moorman et al 1.
Gullett, Robert Oil Corp. 1.
Durocher, Texas Pacific C. & O. Co. 1.
Hodges estate, Texas Pacific C. & O. Co. 6.
J. D. Parsons, Gulf Prod. Co. 1.
J. D. Parsons "A," Gulf Prod. Co. 2, 3, 4.
Parsons, Prairie O. & G. 1.
Parsons, Humble Oil & Ref. Co. 1.
Parsons, Eastland Oil Co. 1.
Grove, Adams et al 1, 2*.
Connellee, Amyx et al 2.
Terry, Delaney 1.
Proctor et al, Eastland Oil Co. 1.
Owen et al, Hickok Prod. & Dev. Co. 1.
Hitson, Hoffer Oil Corp. 1*.
Bell, Inglewright et al 1.
Johnson, McBride 1*.
Butler, Mook et al 1.
Dill, Parnell 1*.
Strickland, Root et al 1*.
White, Rumbaugh & Thompson 1*.
Morgan, Simon et al 1*.
Noble et al, The Texas Company 1.

**CALLAHAN COUNTY**

**Rigs**

Boydston, Gibson & Johnson 1.
Cunningham, Prairie O. & G. Co. 1, 2.
Bond, T. B. Slick 1.

**Wells Drilling**

Windham, Adams et al 1.
Pippin, Andrews Pet. Corp. 1.
Sawyer, Bradstreet et al 1.
Cutbirth, Canary et al 1.
Derrington, Canyon O. & G. Co. 3.
Jackson, Denny & Andrews 1.
Terry, Diamond 1*.
Ellis, French & Lewis 1*.
Maddux, French & Lewis 1*.
Yost, French & Lewis 1.
Smith, Gibson & Johnson 1.
Jackson, Goodloe & Duffy 1.
Cutbirth, Hughes Dev. Co. 1.
Freeland, Hughes Dev. Co. 1.
Minnick, Ingleright 1.
Strahan, McCamey et al 1.
Moore, Mission Drilling Co. 1*.
Cutbirth, Mississippi Valley Oil Co. 1.
Huling, C. O. Moore 1*.
Long, Nichols et al 1.
Robbins, Pennant O. & G. Co. 1.
McDonough, Prairie O. & G. Co. 3.
Young, Roeser & Pendleton 1.
Harris, Southern Pet. Exp. Co. 1.
Gorsuch, Transcontinental Oil Co. 1.
Alvord, White Eagle O. & R. Co. 1.
Barr, Elkerson & Lightfoot 1.

**MITCHELL COUNTY**

**Rigs**

C. P. Conoway, Owens & Sloan 1.
Mary Foster, Magnolia Pet. Co. 2.
H. C. Miller (lease 4), The California Co. 6.
C. M. Adams (lease 3), The California Co. 2.

**Wells Drilling**

Womack, Atlantic O. P. Co. 5.
F. E. McKenzie, B. H. Cogdell 1*.
C. M. Adams, Magnolia Pet. Co. 5.
P. C. Coleman, Magnolia Pet. Co. 1.
C. M. Adams, Magnolia Pet. Co. 4.
Kloh & Rumsey, Magnolia Pet. Co. 1.
A. P. Watson, Bagnolia Pet. Co. 1.
Human, Morrison & Thompson 1*.
W. L. Foster (lease 1), The California Co. 1.
C. M. Adams, (lease 3), The California Co. 1.
J. D. Pettifils, (lease 1), The California Co. 1.
Womack, The California Co. 5.
C. M. Adams (lease 2), The California Co. 3.

**COLEMAN COUNTY**

**Rigs**

Dibrell, Burke-Greis Oil Co. 3, 4.
Dibrell, Burke-Greis Oil and Gwinnup 6, 7.
Dibrell, Independent O. & G. Co. 3.
Dibrell, Midwest Exp. Co. 3-A, 4-A.
Edmondson, Miller & Stovall 1.
Hall, Reeves & Meredith 1.
Dibrell, Western Oil Sales Co. 1.
Dibrell, White Eagle O. & R. Co. 2.
Cox, Neely et al 1.

**Wells Drilling**

Morris, Bateman & Campbell 1*.
Dibrell, Burke-Greis Oil Co. 2.
Dibrell, Burke-Greis Oil and Gwinnup 4.
Davenport, Canyon O. & G. Co. 1.
Sealy & Smith, Curtis et al 1.
Crawford, English et al 1.
Harris, English et al 1*.
Morris, Hughes Dev. Co. 1.
Morris, Magnolia Pet. Co. 16.
Lowe, McChesney 1*.
Dibrell, Mid-Kansas O. & G. Co. 1*, 2.
Dibrell, Midwest Exp. Co. 2-A, 1-B.
Lobstein, Mitcham et al 1.
Dibrell, C. O. Moore 1.
Harris, National O. & R. Co. 1.
Neeb, Pennant O. & G. Co. 1.
Morris, Ross & Wright 1.
Hubbard, Root 1.
West, Wilford et al 1.
Hutchings, Wright & McNallen 1.
Campbell, Bartlett 1*.
Garrett et al, DeArman Bros. 1.
Stearns, Howard Pet. Co. 1*.
Harris, Monroe Prod. Co. 1.
Overall, Monroe Prod. Co. 2.
Pitty, McKenzie et al 1*.
Burk, Morrison & St. John 1*.
Johnson, Newby et al 1*.
Stewardson, Ross & O'Conner 1.
Garrett, Shadbolt & Creighton 1.
Deavers, Van Eman et al 1.

**BROWN COUNTY**

**Rigs**

Holt, Anderson & Shults 1.
Byrd, Blair & Kell 5, 6.
Chambers, Conway Bros. 8.
Pickett, Conway Bros. 8.
Prather, Curry & Moore 2.
Butler, Fagg et al 2.
Prather, Herring 3.
Clark, McLester Oil Co. 7.
Newton, Mendenhall 11.
Westerman, Pandem Oil Corp 2.
Dunn, Phillips Pet. Co. 4.
Pickett, Prairie O. & G. Co. 1.
Suttles, Root 2.
Gaines, Simms Oil Co. 8.
Newton, T. B. Slick 2.
Dunn, Smith Oil Co. 13.
Eubanks, States Oil Corp. 1.
Teston, Valley Oil Co. 1.

**Wells Drilling**

Dunn, Anderson & Shults 1*.
Eddington, Arkansas Fuel Oil Co. 1.
Allen, Barkley & Conway 1.
Dunn, Barkley & Conway 1, 11.
Dunn, Jedichek 1*.
McClan[illegible]an, Berryman et al 1.
Boysen, [illegible]oysen & Ramsier 1.
Gaines, [illegible]own & Co. 1.
Stapp, Carter et al 1*.
Nixon, Carter et al 1.
Wheeler, Carter et al 1*.
Chambers, Conway Bros. 5.
Wooldridge, Conway Bros. 5.
Gaines, J. S. Cosden 2.
Westerman, J. S. Cosden 10.
Williams, J. S. Cosden 8-A.
Kilgore, Curry et al 1.
Church Lot, Curry & Moore 1.
Pickett, Curry & Moore 1*.
Graham Est., Douglas et al 1, 1-A.
Williams, Gholson 1.
Carmichael, Gibson Corp. 1.
Henson, Gillespie 2.
Thompson, Gillman & McMurray 5.
Harrell, Goldrick & Baker 1.
McDonough, Haggard 2*.
Gaines, Jake Hamon, Jr. 1.
Armstrong, Harris Hayes Co. 1*.
Gaines, Hepburn Oil Co. 3*.
Keller, Holdeman 1.
Ariedge, Hughes Dev. Co. 7, 9, 10, 11.
Keller, Hughes Dev. Co. 1.
W. W. Allen, Humble O. & R. Co. 1.
Dunn, Humble O. & R. Co. 7.
Hodnett, Humble O. & R. Co. 3.
Kilgore, Humble O. & R. Co. 2, 3*, 1-B.
Stover, Humble O. & R. Co. 3.
Edington, Humble O. & R. Co. 3.
Graham Est., Jarvis et al 1*.
Henslee, Louisiana O. & R. Co. 1.
Allen, McCarter et al 7.
Leatherwood, McCarter et al 2.
Clark, McLester Oil Co. 4.
J. Woolridge, McLester Oil Co. 1-A.
Gaines, McMan Oil & Gas Co. 1*.
County Farm, Meridian Pet. Corp. 1.
Suttles, Midwest Exp. Co. 2, 3, 4, 5.
Edington, Milham Corp. 2.
Nations, Mims et al 1.
Keeler, Mitcham 1*.
Ramsey, C. O. Moore 1*.
Lehman, J. W. Moore 1*.
Hill, Nelson & Crabtree 1.
Gaines, O'Brien & Quinn 1.
Dunn, Phillips Pet. Co. 1, 3.
Prather, Phillips Pet. Co. 2.
Gaines, Prairie O. Q G. Co. 15.
Trammel, Prairie O. & G. Co. 1.
Turner, Prairie O. & G. Co. 1.
Jones, Ratblott 1*.
Suttles, Root 3.
Buzbee, Root & Rhodes 1.
Prather, Schaffner & Wilson 10.
DeBusk, T. B. Slick 1.
Starr, T. B. Slick 3.
Giddings, Superior Oil Corp. 1*.
Dunn, The Texas Co. 13, 14.
Patterson, Thomas & Reynolds 1.
J. Woodridge, Thompson 1.
Roe, Troutt et al 1*.
Newton, West & H-Y Oil Co. 4, 5.
Newton, Williamson 3.
Conklin, Andrade et al 1.
Ferguson, Arkansas Fuel Oil Co. 1.
Roirdan, Cox & Spratt 1*.
Taylor, Fain et al 1*.
Reed, Haynes 1.
Denman, Haynes et al 1.
Davis, Jannellen Oil Co. 1*.
Trevooren, Mitcham 1.
Browder, Mitcham & Logan 1*.
Eabs, Moore & Fuhrman 1.
Warnock, Morris 1*.
Parks, Richarson et al 2*.
Mattock, Savings & Scoggins 1.
Cleveland, Schoonmather 1*.
Hall, Shadbolt & Creighton 1*.

**REAGAN COUNTY**

**Rigs**

University, Big Lake Oil Co. 5-B.
Sawyer Cattle Co., Marland Oil Co. (Pickrell), 1.
University (group 1), Texon O. & L. Co. 6-A.

**Wells Drilling**

University, Big Lake Oil Co. 57, 64, 68, 69, 70, 71, 72, 73, 74, 75, 1-B, 2-B, 3-B, 4-B, 7-B, 17-A, 20-A, 25-A.
University, Camp et al 1.
Sawyer Cattle Co., Marland Oil Co. (Mascho) 1.
Wolters, Simon et al 1.
University, Tannehill et al 1*.
J. D. Sugg, The Texas Co. 1*.
University (Group 1), Texon O. & L. Co. 38, 39, 40, 41, 42, 44, 45, 46, 2-A, 3-A*, 4-A, 5-A.

**UPTON COUNTY**

**Rigs**

Sanger Bros., Gulf Prod. Co. 1.
Sanger Bros., Marland Oil Co. 3, 4, 5.
A. S. Burleson, Marland Oil Co. 4, 5, 6, 7, 8, 1-A.
Ed S. Hughes, Marland Oil Co. 1-B.

**Wells Drilling**

Burleson, Dixie Oil Co. 3*.
E. S. Hughes, Eastland Oil Co. 1.
M. L. Baker, Gulf Prod. Co. 1.
J. T. McElroy, Gulf Prod. Co. 1.
Halff, Hults et al 1*.
Union Land Co., Plateau Oil Co. 1.
Noelke & Murphy, Marland Oil Co. and Choate & Henshaw 1*.
Mrs. M. L. Baker, Republic Prod Co. 2.
Mrs. G. V. Bull, Sartain Bros. & Davis 1*.
Union Land Co., The Texas Company 1.
Union Land Co., Tidal Oil Co. 1*.
University, Willis Campbell et al 1*.

**CRANE COUNTY**

**Rigs**

O'Keefe (University), Magnolia Pet. Co. 1.
W. F. Durham, Marland Oil Co. 1.
E. S. Hughes, Marland Oil Co. 1-C.

**Wells Drilling**

Jax Cowden, Cordona Oil & Potash Co. 1*.
Conneli, J. S. Cosden 1.
W. H. Penix, Gilliam & Logan 1.
E. S. Hughes, Marland Oil Co. 1.
Jax Cowden, Penn Texas Dev. Co. 1.
Union Land Co., The Texas Co. 1"F."
Jax Cowden, Texas Dev. Co. 1*.

**CROCKETT COUNTY**

**Rigs**

Powell, Humble O. & R. Co. 9.
R. Massie, Young et al 1.

**Wells Drilling**

University, The California Co. 2.
Powell, Cromwell et al 3, 4.
J. M. Shannon, Crockett Drig. Synd. 2*.
Couch, Cumberland O. & G. Co. 1*.
Noelke, J. S. Cosden 1.
Powell "A", Gulf Prod. Co. 2, 3.
Geo. L. Thompson, Gulf Prod. Co. 1.
Powell, Humble O. & R. Co. 4, 5, 6, 7, 8.
Powell (32.5 ac.), J. K. Hughes Dev. Co 1.
Powell (80 ac.), J. K. Hughes Dev. Co. 1.
J. M. Shannon, Magnolia Pet. Co. 1.
J. S. Todd, Marland Oil Co. 1.
University, Wm. Schaffer et al 1*.
J. M. Shannon, Ben Simon et al 1*.
University, H. F. Wilcox O. & G. Co. 1*.
University, F. P. Zoch et al 1.

**MISCELLANEOUS COUNTIES**

**Rigs**

**BAYLOR COUNTY**

Portwood, Magnolia Pet. Co. 7.

**CLAY COUNTY**

Holloway, Lone Star Gas Co. 21.
T. A. Matlock, Western Oil Corp. 1.
R. M. Waggoner, Winnipeg Oil Co. 2.

**WISE COUNTY**

R. B. White, Walker Valley Oil Co. et al 1.

**JACK COUNTY**

Wilson, Wolf Oil Corp. of Okla. 1.

**HOWARD COUNTY**

Scott, Lockhart & Carey 1.
Otis Chalk, Lockhart & Carey 1.
Dora Roberts, Lockhart & Carey 1.
Chalk, Marland Oil Co. 1.
Chalk, Magnolia Pet. Co. 1.

**LOVING COUNTY**

R. L. Allen, Lockhart & Co. 1.

**ECTOR COUNTY**

G. W. Connell, J. S. Cosden et al 1 "A", 1 "B".
J. W. Buchanan, Skinner et al 1.
Kloh & Rumsey, The Exploration Co. 1.

**STERLING COUNTY**

C. A. Broome, The Exploration Co. 1.

**TOM GREEN COUNTY**

Pulliam, World Oil Co. 1.

**REEVES COUNTY**

State Land, Gresham & Hunter 1.

**PECOS COUNTY**

Scharff-Blackman, Cromwell & Kimberlin 1.

**SCHLEICHER COUNTY**

J. A. & W. T. Whitten, Beavers & Leath 1.
Sol Meyer, Cope & Dalton 1.

**Wells Drilling**

L. M. Woodward, Overson & Keagans 1*.

**HARDEMAN COUNTY**

Wheat, Benedum & Trees 1*.
Evans, Staley & Wynne et al 1*.

**FOARD COUNTY**

Burress, Central Oil Ints. 1*.
Easley, Humble Navarro Oil Co. 1*.

**COTTLE COUNTY**

A. C. Dulaney, T. J. Woodley et al 2*.

**KING COUNTY**

Frank Patton, Hoffer Oil Corp. 1*.

**KNOX COUNTY**

Clark, Brazos Bend Oil Co. 1*.
Lawson, Robert Sanders 1*.

**BAYLOR COUNTY**

Stevens "A", Head et al 1.

**CLAY COUNTY**

G. A. Scaling, Hamilton, Barkley & Meadows 1.
M. K. Inman, Howard Pet. Co. et al 1-A.
Holloway, Lone Star Gas Co. 20.
J. D. Stine, Western Oil Corp. 1.
Scaling, Atlantic City Pet. Co. 1*.
Warren Est., J. T. Cumley & Stine 2.
Stine Est., J. T. Cumley & Stine 2.
Dowlen & Son, W. P. Ferguson et al 1.
Waggoner, Lone Star Gas Co. 28.
A. Culbertson, Lowry Oil Corp. 2.
Kaufman & Jones, Western Oil Corp. 2.
C. M. Worsham, Gulf Prod. Co. 7.

**COOKE COUNTY**

Lester, Big Indian O. & G. Co. 1.
Osborne, Elliott & Wallace 1*.
Hyman, C. C. Lanier et al 1.
Hamilton, Leonard & James 1*.
Houston, H. H. Simpson et al 1.

**FANNIN COUNTY**

Whitting, J. W. Atkins 1*.
Moore, Erin Oil Co. 1*.
Owens, Payne-Bond et al 1*.

**DENTON COUNTY**

Fortenberry, Gainesville Synd. 1*.

**WISE COUNTY**

Cassidy, Magnolia Pet. Co. 2.
Castlebury, Transcontinental Oil Co. 1*.

**JACK COUNTY**

First Nat. Bank, Security Drlg. Co. (Bridwell & Heydrick), 1.
Oliver, Buttram Pet. Co. 1.
Preston, Buttram Pet. Co. 3, 4.
Thomason, Dingee et al 1.
Allen, Ilseng Prod. Co. 1.
Pickrell, Kerbow et al 1.
Jones Est., Murchison & Fain 1.
Gray, Rochelle et al 1.
Cullers, Seaboard Oil Co. 1.
Carpenter Est., Watchorn O. & Gas. Co. 1.

**HASKELL COUNTY**

Bunkley, Bridwell & Mayfield 1.
Ballard, Kouri et al 1.
Colbert, Weirt & York 1*.

**STONEWALL COUNTY**

Craft, Arkansas Fuel Oil Co. 1.
Ward et al, Elder Nance 1*.
J. M. Thomas, Elder Nance 1*.
J. Q. Ward, Ward Synd. 1.

**KENT COUNTY**

Barron, The Texas Co. 1.

**GARZA COUNTY**

Swenson, Deep Rock Oil Co. 1.
Connell, Emerald Oil Co. 1 "A"*.

**LYNN COUNTY**

Edward, Hart Oil Corp. 1.

**YOAKUM COUNTY**

Hinkle, Russell & Trunick 1.

**GAINES COUNTY**

Lindsay, Hucony Gas Co. (formerly Phelps & Mundy), 1*.

**SCURRY COUNTY**

J. O. Guinn, Camp Springs O. & R. Co. 1.
Boyce, Fogelson et al 1*.
Welborn, Northwest Oil Co. 1-A*.

**FISHER COUNTY**

Isaac Harris, McCool et al 1*.

**JONES COUNTY**

Wm. Bristow, Shaw & Rathke et al 1.
Rowell, J. C. Yancey et al 1*.
Herndon, J. C. Yancey et al 1*.

**PALO PINTO COUNTY**

Dalton, Dalton 6.
Dalton, M. Dalton 1*.
Smith, Singleton et al 1*.
McClure, Whatley et al 1*.
Edgin, Dalton 1.
Cardwell, Hart 1*, 2*.
Orme, Hart 1*.
Rasmussen, Pender Prod. Co. 2.
Robinson, Moore & Snebold 1.
Costello Bros., Whatley et al 1*.

**PARKER COUNTY**

Stickford, Coffin et al 1*.
Davis, Monroe 1*.

**ERATH COUNTY**

Barton, Gillett 1*.
Laney, Goodwin 4.
Finch, Nelson Oil Co. 3*.

**TAYLOR COUNTY**

R. H. Anderson, Sanger Oil & R. Co. 1*.
Norwood, Sanger Oil & R. Co. 1.

**HOWARD COUNTY**

W. T. Scott, Deep Rock Oil Co. 1.
H. R. Clay, Fred Hyer 1*.
Chalk, Owens & Sloan 2.
H. R. Clay, Reeves & Apperman 1*.
Roberts, Transcontinental Oil Co. 1.

**CULBERSON COUNTY**

Kloh & Rumsey, Deep Rock Oil Co. 1.
Mrs. G. H. Quaid, Pure Oil Co. 1.

**WINKLER COUNTY**

T. G. Hendrick, P. A. Westbrook et al 1.

**ECTOR COUNTY**

J. L. Johnson, Henry Zweifel et al 1.

**MIDLAND COUNTY**

Jones, M. Agress et al 1*.
Hill, Rook & Zimmerman 1*.

**GLASSCOCK COUNTY**

W. H. Sparkman, Case & Hoover 1*.
Nellie Calder, Marland Oil Co. 1.

**STERLING COUNTY**

Douthit, Co-Operative Lse. & Dev. Co. 1 "A"*.
L. T. Clark, Deep Rock Oil Co. 1.

L. T. Clark, H. D. Rummel 2.
J. T. Davis, The California Co. 1.

**COKE COUNTY**

E. C. Rawlings, Lipan Oil Co. 1*.

**COMANCHE COUNTY**

Evans, Brown Drilling Co. 1.
Campbell, Dublin Dev. Co. 1*.
Utterback, Trojan Oil Co. 1*.

**CONCHO COUNTY**

Schultz, Kemper & Kimberlin 1.

**TOM GREEN COUNTY**

Llano Co. School Lands, M. D. Bryant et al 1.
L. Y. Clark, Roxana Pet. Corp. 1*.

**IRION COUNTY**

Sawyer Cattle Co., Oklavania Oil Co. 1*.
Ash Bros., P. H. Williams 1.

**WARD COUNTY**

Marston, Chesapeak Oil Co. 1.
Hutchings Stock Assn., Gulf Prod. Co. 1.

**REEVES COUNTY**

Kloh & Rumsey, Humble O. & R. Co. 1.
Abrams, Schooler, Slack et al 1.
Kloh & Rumsey, World Oil Co. 1.

**JEFF DAVIS COUNTY**

Wingo, Herbert Oil Co. 1*.
W. W. McCutcheon, Humble O. & R. Co. 1.

**PECOS COUNTY**

A. A. Gray, Tom Adams Oil Co. 1*, 2*.
Hershenson, Dixie Oil Co. 1.
Townsite, Quinby et al 1.
Devlin, Levi Smith et al 1*.
Perry, Transcontinental Oil Co. 1.
Macy, West Texas Explor. Co. 1*.

**SUTTON COUNTY**

Allison, Chesapeak Oil Co. 1.

**VAL VERDE COUNTY**

Moore Est., A. Blume 1.
Russell & Weathersbee, East Del Rio Oil Co. 1*.
W. J. & W. E. Whitehead, Independent Operators 1*.
Moore Est., Joe W. Morris 1*.
B. S. Harrison, Plateau Oil Co. 1.
Moore, E. T. Williams 1*.

**TERRELL COUNTY**

Sowden, E. T. Williams et al 1*.

**BREWSTER COUNTY**

J. P. Wilson, Green Valley Oil Co. 2.
Skinner, Roseborough & Skinner 1.

**PRESIDIO COUNTY**

Tootle Est., Headlock & Miller 1*.

**HUTCHINSON COUNTY**

(Note: * indicates well shut down).
Sec. 13, Blk. Y-2, Bivins "B", Amarillo Oil 4.
Sec. 11, Blk. Y, Smith, Apex Oil 2.
Sec. 12, Blk. Y, Whittenburg, Canyon Oil Co. 4, 5.
Sec. 12, Blk. Y, Whittenburg, Continental Oil Co. 1.
Sec. 12, Blk. Y, Whittenburg, Coble, Whittenburg 3.
M. Whitley sur., Johnson Bros. (tr. 8), Derby Oil 2.
Sec. 20, Blk Y, Johnson, Devonian Oil 2, 3.
Sec. 11, Blk. Y, Smith, Dixon Creek Oil 10, 11.
Sec. 14, Blk. Y, Smith, Dixon Creek Oil 17.
Sec. 5, Blk. Y, Smith, Dixon Creek Oil 33, 34, 35, 36.
Sec. 19, Blk. Y, Johnson Bros., Empire Gas & Fuel 1 (water well).
Sec. 19, Blk. Y, Carver, Lee Flowers et al 1.
Sec. 19, Blk. Y, Weatherly, Fly-Blackburn Oil 2.
M. Anglin sur., Christian, Gulf Prod. Co. 1.
Sec. 24, Blk. 47, Dial, Gulf Prod. Co. 10.
Sec. 65, Blk. 46, E. B. Johnson et al, Gulf Prod. Co. 1, 2, 3.
M. Whitley sur., J. A. Whittenburg, Gulf Prod. Co., 3, 4, 5, 2-A, 4-A, 5-A.
Sec. 27, Blk. 47, Whittenburg, Gulf Prod. Co. 2-D.
Sec. 27, Blk. 47, Whittenburg, Gulf Prod. Co. 1-E, 2-E.
Sec. 27, Blk. 47, Fee (Panhandle, Gulf & Cline) 1.
Sec. 13, Blk. M-23, McCormick Est., Gibson Oil Co. & McMillan 1.
Sec. 6, Blk Y, Kingsland, J. K. Hughes 4-A, 7-A, 8-A, 9-A, 10-A, 11-A, 16-A, 17-A.
Sec. 11, Blk. Y, Smith, Lenix & Pattison 2.
Sec. 5, Blk. Y, W. R. Harvey, Madden et al 1.
Sec. 128, Blk. 5, Burnett "D", Marland Oil Co. 1.
Sec. 20, Blk. Y, Johnson Bros., Marland Oil Co. 1-A, 2-A.
Sec. 29, Blk. 47, Reimer, Marland Oil Co. 1.
Sec. 19, Blk. Y, Weatherly, Marland Oil Co. 1-B.
Sec. 65, Blk. 46, Whittenburg, Marland Oil Co. 1, 2, 3, 4.
M. Whitley sur. Whittenburg, Marland Oil Co. 1-A, 2-A, 3-A, 4-A.
M. Whitley sur. Whittenburg, McCamey & Shearin 1, 2.
Sec. 5, Blk. Y, Smith, McIlroy & Herring 3, 4.
Sec. 5, Blk. Y, Smith, McMan O. & G. Co. 5.
Sec. 21, Blk. Y, Johnson-Whittington, McMan O. & G. Co. 1.
Sec. 70, Blk. 46, Johnson Bros., Midwest Exp. Co. 1.
M. Whitley sur., Johnson Bros., A. D. Morton 2.
Sec. 64, Blk. 46, Johnson-Barnum, Phillips Pet. Co. 2.
Sec. 13, Blk. Y, Whittenburg, Phillips Pet. & Coble 10, 12, 13, 14.
Sec. 12, Blk. Y, Whittenburg, Phillips Pet. & Coble 11.
Sec. 63, Blk. 46, Whittenburg, Phillips Pet. & Gibson 3, 4, 5.
M. Whitley sur., Johnson-Graham, Phillips Pet. Co. 2.
M. Whitley sur., Haines-Whittenburg, Phillips Pet. Co. 1, 2.
Sec. 13, Blk. Y, Whittenburg, Phillips Pet. & Parks Oil 3, 4.
Sec. 12, Blk. Y, Smith-Capers, Phillips Pet. & Pulaski 2.
M. Whitley sur., Johnson Bros., Phillips Pet. & Williams 2.
M. Whitley sur., Johnson Bros., (tr. 1), Phillips Pet. & Pulaski 2.
Sec. 23, Blk. Y, Weatherly, Prairie O. & G. Co. 3.
Sec. 6, Blk. M-26, H. Jasper, Roxana Pet. Corp. 1.
Sec. 14, Blk. Y, Smith, Roxana Pet. Corp. 4.
Sec. 11, Blk. Y, Smith, Roxana Pet. Corp. 4-B, 5-B.
Sec. 12, Blk. Y, Whittenburg, Sunny Jim Oil Co. 3.
Sec. 62, Blk. 46, Whittenburg, Texhoma O. & R. Co. 1.
Sec. 3, Blk. Y, E. Cockrell, J. D. Ward 2.
Sec. 13, Blk. Y, Whittenburg, Westex Oil Co. 4.
Sec. 64, Blk. 46, Johnson Bros., White Eagle O. & R. 2.
Sec. 64, Blk. 46, Hagy-Johnson, White Eagle O. & R. 1, 8.
Sec. 4, Blk. B-4, Grace-Johnson, White Eagle O. & R. 1.

**HUTCHINSON COUNTY**
**Wells Drilling**

Sec. 2, Blk. B-4, Bivins, American Ref. Co. 2.
Sec. 11, Blk. Y, Smith, Apex Oil Co. 1.
Sec. 10, Blk. M-21, E. E. Watkins, Bear Creek Oil Co. 1.
Sec. 37, Blk. 47, Cal Merchant, Big Creek Oil Co. 1.
Sec. 4, Blk. Y, Kingsland, Canadian River Oil Co. 4.
Sec. 12, Blk. Y, Whittenburg, Canyon Oil Co. 1.
Sec. 12, Blk. Y, J. E. Pritchard, Center Dome Oil 1.
Sec. 12, Blk. Y, Whittenburg, Coble-Whittenburg, 1, 2, 4.
Sec. 14, Blk. Y, Smith, Cockrell-McIlroy 1, 2.
M. Whitley sur., Johnson Bros., Derby Oil Co. 1.
Sec. 20, Blk. Y, Johnson Bros., Derby Oil et al 1.
Sec. 11, Blk. Y, Smith et al, Dixon Creek Oil 3, 4, 5, 6, 7, 8, 9, 12.
Sec. 14, Blk. Y, Smith et al, Dixon Creek Oil 13, 14, 15, 18.
Sec. 12, Blk. Y, Smith et al, Dixon Creek Oil 21.
Sec. 5, Blk. Y, Smith et al, Dixon Creek Oil 29.
Sec. 2, Blk. Y, E. Cockrell, Double 5 Oil Co. 1.
Sec. 15, Blk. XO2, Whittenburg, Douglas Oil & Cline 1.
Sec. 17, Blk. Y, Weatherly, Drysdale Oil Co. 1*.
Sec. 11, Blk. Y, Smith et al, Echo Oil Co. 1, 2.
Sec. 19, Blk. Y, Weatherly, Empire Gas & Fuel 1.
Sec. 19, Blk. Y, Weatherly, Fly-Blackburn Oil 1.
Sec. 4, Blk. Y, Kingsland, Gates Oil Corp. 3, 4.
Sec. 34, Blk. M23, Dial et al, Gulf Prod. Co. 9.
Sec. 2, Blk. XO3, Sanford, Gulf Prod. Co. 1-B.
Sec. 5, Blk. M26, J. T. Hodges, Gulf Prod. Co. 1.
Sec. 89, Blk. 2, Whittenburg, Gulf Prod. Co. 1-B.
M. Whitley sur., Whittenburg, Gulf Prod. Co. 1-A, 3-A.
M. Whitley sur., E. Cockrell, Gulf Prod. Co. 1.
Sec. 74, Blk. 46, Johnson, Gibson Oil Corp. 1.
Sec. 4, Blk. Y, Kingsland, Gibson Oil Corp. 4, 5.
Sec. 6, Blk. B-4, Kingsland, Gibson Oil & McMillan 1.
Sec. 28, Blk. Y, Johnson Bros., Gibson Oil & McMillan 1.
Sec. 1-A, Blk. M-26, J. T. Hodges, Golding & Phillips 1.
Sec. 31, Blk. Y, W. S. Christian, W. Scott Heywood 1.
Sec. 14, Blk. Y, Smith, Heywood et al 1.
Sec. 12, Blk. Y, Smith et al, Holmes, Currie & McKnight 1.
Sec. 6, Blk. Y, Kingsland, J. K. Hughes Dev. Co. 2-A, 3-A, 5-A, 6-A.
Sec. 6, Blk. Y, Earle Thompson, Inspiration Oil 1.
Sec. 6, Blk. Y, Smith et al, Dan A. Japhet 1.
Sec. 11, Blk. Y, Johnson Bros., J. K. Lenix 1.
Sec. 6, Blk. I, Johnson Bros., Marland Oil Co. 1.
Sec. 35, Blk. M-23, Belle Wisdom, Marland Oil Co. 1.
Sec. 19, Blk. Y, Weatherly, Marland Oil Co. 1-A.
Sec. 14, Blk. Y, Smith, S. D. & W. W. McIlroy 1, 2, 3.
Sec. 5, Blk. Y, Smith, McIlroy & Herring 2.
Sec. 5, Blk. Y, Smith, McMan O. & G. Co. 1, 2, 4.
Sec. 66, Blk. 46, Johnton Bros., McMan O. & G. Co. 1.
Sec. 15, Blk. Y, Smith, J. H. Middleton 1, 2.
Sec. 5, Blk. Y, Smith-Capers, Midwest Exp. Co. & Holmes 1, 2, 3, 4, 5.
Sec. 5, Blk. Y, Johnson Bros., A. D. Morton 1.
Sec. 4, Blk. Y, Kingsland, New Domain Oil 1, 2.
Sec. 4, Blk. Y, Smith, Phillips & Heywood 1.
Sec. 64, Blk. 46, Johnson-Barnum, Phillips Pet. Co. 1.
Sec. 13, Blk. Y, Whittenburg, Phillips Pet. & Coble Oil 2, 3*, 5, 6.
Sec. 12, Blk. Y, Whittenburg, Phillips Pet. & Coble Oil 4*, 7, 8, 9.
M. Whitley sur., Johnson-Finklea, Phillips Pet. 1.
Sec. 21, Blk. Y, Johnson-Gordon, Phillips Pet. Co. 1.
Sec. 12, Blk. Y, Mary Huff-Whittenburg, Phillips Pet. 1, 2, 3.
Sec. 72, Blk. 46, Johnson-Stephens, Phillips Pet. Co. 1.
M. Whitley sur., Whittenburg (Patton), Phillips Pet. & Gibson Oil 1.
Sec. 63, Blk. 46, Whittenburg, Phillips Pet. & Gibson Oil 2.
Sec. 13, Blk. Y, Whittenburg, Phillips Pet. & Parks Oil 1.
Sec. 62, Blk. 46, Whittenburg, Phillips Pet. & Gibson Oil 2.
Sec. 68, Blk. 46, Johnson-Neil, Phillips Pet. 1.
Sec. 2, Blk Y, E. Cockrell, Phillips Pet. & Pulaski 1.
Sec. 12, Blk Y, Smith-Capers, Phillips Pet. & Pulaski 1.
Sec. 5, Blk. Y, Smith (J. Wright), Phillips Pet. & Pulaski 1.
Sec. 12, Blk. Y, Whittenburg, Phillips Pet. 1*, 3*.
Sec. 4, Blk. B-4, Johnson Bros., Prairie O. & G. 1.
Sec. 3, Blk. I, Johnson Bros., W. R. Ramsey 1*.
Sec. 11, Blk. Y, Smith, Relief Oil Co. 1*, 2, 3.
Sec. 11, Blk. Y, Smith, Riley & Holmes 1.
Sec. 86, Blk. 46, Lee Bivins, Roxana Pet. 1.
Sec. 14, Blk. Y, H. E. Smith, Roxana Pet. 2, 3*.
Sec. 11, Blk. Y, Smith, Roxana Pet. Corp. 1-B, 2-B, 3-B.
Sec. 95, Blk. 5-T, O. W. Jarvis, W. W. Silk 1.
Sec. 4, Blk. B-4, Johnson Bros. "A", Skelly Oil Co. 1, 2, 3.
Sec. 22, Johnson, Skelly Oil Co. 3.
M. Whitley sur., Johnson, Skelly Oil Co. 4, 5.
Sec. 6, Blk. Y, Kingsland, Skiatex Oil Co. 3, 4.
Sec. 33, Blk. Z, Wm. Lyal, Smith & Wilbank 1*.
Sec. 12, Blk. Y, Whittenburg, Smith & Bynum 2.
Sec. 7, Blk. Y, Smith, J. L. Smith 1.
Sec. 12, Blk. Y, Whittenburg, Sunny Jim Oil Co. 2.
Sec. 13, Blk. Y, Whittenburg, Summit Oil Co. 1, 2.
Sec. 8, Blk. B-3, E. Cockrell, J. A. Swindler & Son 1.
Sec. 6, Blk. 9, E. Cooper, The Texas Co. 1.
Sec. 132, Blk. 5, S. B. Burnett, The Texas Co. 7.
Sec. 1, Blk. Y, Johnson Bros., Tex-O Oil Co. 1.
Sec. 6, Blk. Y, Kingsland, Travelers Oil Co. 2.
Sec. 5, Blk. Y, Smith, Triangle Oil Co. 1.
Sec. 3, Blk. Y, E. Cockrell, J. D. Ward 1.
Sec. 8, Blk. Y, O. W. Jarvis, Western O. & D. Co. 1.
Sec. 13, Blk. Y, Whittenburg, Westex Oil Co. 3.
Sec. 11, Blk. Y, Smith-Capers, White Eagle O. & R. Co. 2, 3, 4.
Sec. 12, Blk. Y, Whittenburg, White Eagle O. & R. Co. 1, 2.

**CARSON COUNTY**
**Rigs**

Sec. 116, Blk. 5, S. D. Burnett, Gulf Prod. Co. 14.
Sec. 106, Blk. 5, S. D. Burnett, Gulf Prod. Co. 15, 16.
Sec. 115, Blk. 6, S. D. Burnett, Magnolia Pet. Co. 3.
Sec. 107, Blk. 5, Burnett Est., Marland Oil Co. 6, 7.
Sec. 105, Blk. 5, Burnett "C", Marland Oil Co. 1.
Sec. 128 Blk. 5, Burnett "D", Marland Oil Co. 1.
Sec. 5, Blk. 5, Deahl, Prairie O. & G. Co. 1.
Sec. 92, Blk. 4, E. F. Ryan, Roxana Pet. Corp. 1.
Sec. 127, Blk. 5, M. C. Burnett, The Texas Co. 9.

**Wells Drilling**

Sec. 15, Blk. Y-2, Lee Bivins, Amarillo Oil Co. 3-B.
Sec. 22, Blk. Y-2, E. S. Polling, Amatex Oil Co. 1.
Sec. 115, Blk. 5, Burnett Est., American Ref. C. 6, 7.
Sec. 115, Blk. 5, Burnett Est., Gates Oil Co. 2*.
Sec. 106, Blk. 5, S. B. Burnett, Gulf Prod. Co. 10, 11.
Sec. 116, Blk. 5, S. B. Burnett, Gulf Prod. Co. 12, 13.
Sec. 115, Blk. 5, Burnett, Magnolia Pet. Co. 2.
Sec. 116, Blk. 5, Burnett Est. "A", Marland Oil Co. 2, 3, 4.
Sec. 101, Blk. 4, Burnett Est. "B", Marland Oil Co. 1*.
Sec. 107, Blk. 5, Burnett Est., Marland Oil Co. 5.
Sec. 1, Blk. 7, G. W. Whittier, McFarland & Thomas 1.
Sec. 115, Blk. 5, Burnett Est., W. W. Silk et al 6.
Sec. 115, Blk. 5, M. C. Burnett, The Texas Co. 4.
Sec. 92, Blk. 5, M. C. Burnett, The Texas Co. 8.
Sec. 65, Blk. 4, J. C. McConnell, Young & Patrick 1.

**MOORE COUNTY**
**Rigs**

Sec. 59, Masterson "J", Amarillo Oil Co. 1.
J. T. Sneed, Jr., Lee Flowers & Brookins 1.
H. C. Rubert, Morton & Co. 1.
Sec. 26, Blk. 6-T, J. T. Sneed, Jr., Prairie O. & G. Co. 2.

**Wells Drilling**

Sec. 19, Blk. 44, Terry Thompson, Amarillo Oil Co. 1.
J. T. Sneed, Jr., Cadman et al 1*.
J. T. Sneed, Jr., Phillips Pet. Co. 1.
J. T. Sneed, Jr., Moore Co. Oil Co. 1.

**GRAY COUNTY**
**Rigs**

Sec. 62, Blk. 3, Worley & Reynolds, Wilcox-Pampa Oil Co. 4.

**Wells Drilling**

Sec. 82, Blk. 3, Merten Bros., Clark & Baldridge 1.
Sec. 82, Blk. 3, Saunders, The Texas Company. 2*.
Sec. 59, Blk. 3, Combs & Worley, Wilcox-Pampa Oil Co. 2.
Sec. 62, Blk. 3, Worley & Reynolds, Wilcox-Pampa Oil Co. 3.

**WHEELER COUNTY**
**Rigs**

Sec. 41, Blk. B-24, H. C. Phillips, Gibson Oil Corp. 2.
Sec. 53, Blk. A-4, Sorenson, Smith, Brady et al 1.

**Wells Drilling**

Sec. 41, Blk. B-24, H. C. Phillips, Gibson Oil Corp. 3.
Sec. 21, Blk. A-8, J. M. Shelton, Midwest Exploration Co. 1*.
Sec. 21, Blk. A-8, Roger O'Gorman, Hal H. Vaughan 1.

**HARTLEY COUNTY**
**Rigs**

Sec. 2, Blk. 2, Lyman & Balfour, Deep Rock Oil Co. 1.

**DALLAM COUNTY**
**Well Drilling**

Sec. 9, Blk. 47 1-2, James, James et al 1.

**SHERMAN COUNTY**
**Rigs**

Sec. 35, Blk. 2, Lee Bivins, Eclipse Drlg. Co. 1.
Sec. 35, Blk. 2, Lee Bivins, Get Oil Co. 1.

**POTTER COUNTY**
**Rigs**

Sec. 3, Blk. 1, J. A. Jones, Farmers O. & G. Co. 1.
Sec. 3, Blk. 1, W. H. Bush, Gulf Prod. Co. 1.

## EAST CENTRAL TEXAS

**Summary of Field Operations**

| | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Anderson | 3 | 0 | 3 | 0 | 1 | 1 | 2 |
| Cherokee | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| Cherokee | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Ellis | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Falls | 1 | 0 | 1 | 0 | 0 | 1 | 1 |
| Freestone | 1 | 0 | 1 | 0 | 0 | 1 | 1 |
| Henderson | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Hill | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Hopkins | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Hunt | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Limestone | 6 | 200 | 3 | 1 | 1 | 5 | 6 |
| Kaufman | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Milam | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Navarro | 2 | 175 | 1 | 0 | 0 | 7 | 7 |
| Total May | 14 | 375 | 10 | 1 | 2 | 29 | 31 |
| Total April | 9 | 50 | 8 | 0 | 2 | 31 | 34 |
| Difference | 5 | 325 | 2 | 1 | 1 | 2 | 3 |

**NAVARRO COUNTY**
**Wells Completed**

McKie, Pure Oil Co. 68 ..... 175
Kenner, Penn, Black et al 1 ..... dry

**LIMESTONE COUNTY**

Strathers, Yoder et al 1 ..... gas
Stockton, Pure Oil Co. 1 ..... 200
Ross, Transcontinental Oil 1 ..... dry
DeLong, Reiter-Foster et al 1 ..... dry
Head, Morley & Morley 1 ..... dry
Lindley, Pure Oil 3 ..... dry

**ANDERSON COUNTY**

Brock Auld, Rosser Pet. 1 ..... dry
Brock Auld, Rosser Pet. 2 ..... dry
Smuller, Navarro Oil 1 ..... dry

**FALLS COUNTY**

Kelsey, Helfin et al 1 ..... dry

**HILL COUNTY**

Jones, Eagle Drlg. Co. 1 ..... dry

**FREESTONE COUNTY**

Bounds, Patterson Lake Oil 1 ..... dry

**Rigs**

So. Pine Lbr. Co., Humble O. & R. 1.

**LIMESTONE COUNTY**
**Wells Drilling**

Hargrave, Eisenmyer et al 1.
* indicates the well is shut down.

**ANDERSON COUNTY**

Greenwood, Navarro Oil Co. 3.

**CHEROKEE COUNTY**

Ousley, Humphreys Corp. 1.
Earle & Ragsdale, Humble O. & R. 1.
Clapp, Humphreys Corp. et al 2.
Hill, Nicholle et al 1.

**ELLIS COUNTY**

Griffiths, Simms Oil Co. 1.

**FALLS COUNTY**

Peacock, High Banks Oil 1.

**FREESTONE COUNTY**

Pickens, Kechi Pet. 1*.

**HENDERSON COUNTY**

Sterrett, Ferd. Heine 1*.
Bounds, F. Haynes 3*.
Martin, Evans et al 1*.

**HOPKINS COUNTY**

Brooks, Kelsey et al 1.

**HUNT COUNTY**

Barnett, Tullall & Kelsey 1*.
Hicks, Gulf Prod. Co. 1.

**KAUFMAN COUNTY**

Williamson, J. D. Harper 1.

**LIMESTONE COUNTY**

Richardson, Wells et al 1*.
Ellis, J. K. Hughes et al 15*.
Rosson, Transcontinental Oil 1.
Locke, Swearingen & Collicotte 1.
Curry, Patty Kosse 1.

**MILAM COUNTY**

Brown, Allen & Harper 1.
Seilke, Alexander & Liles et al 1.

**NAVARRO COUNTY**

Mitchell, Osborne et al 1.
Slaughter, Kerr & Gillette 1.
Fullwood, Dr. Johnson et al 1*.
Woolens, Garland Kent 1.
Hillburn, Barclay & Meadows 5.
McClelland, McDonald Bros. 2*.
Longbotham, Snowden & McSweeney 13*.

## SOUTHWEST TEXAS

**Summary of Field Operations**

| District | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Luling | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Mirando | 20 | 6,400 | 1 | 6 | 12 | 34 | 46 |
| Somerset | 2 | 20 | 0 | 0 | 1 | 2 | 3 |
| Rockdale-Minerva | 3 | 55 | 0 | 0 | 2 | 7 | 9 |
| Lockhart | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Miscel. | 6 | 0 | 5 | 1 | 18 | 54 | 72 |
| Ttls. May | 31 | 6,475 | 6 | 7 | 33 | 102 | 135 |
| Ttls. April | 34 | 3,518 | 11 | 14 | 31 | 92 | 123 |
| Difference | 3 | 2,957 | 5 | 7 | 2 | 10 | 12 |

**Wells Completed**
**Luling**
**None**
**MIRANDO**
**JIM HOGG COUNTY**

Hinant, O. W. Killiam 1. ..... gas
Hinant, O. W. Killiam 4 ..... gas
Holbein, Kisselman & St. Albans 30 ... 700
Las Animas, Associated Oil 1 ..... gas
Randado, Houston-Gulf Gas, 4 ..... 2000
Randado, Simms Oil 2 ..... 200

**DUVAL COUNTY**

Bruni, G. M. Ball 1 ..... 200
Cole, G. M. Ball 1 ..... 200
Allen, Benedum & Trees, 1 ..... sw

**WEBB COUNTY**

Killiam, Wheatley Oil 43 ..... 200
———, Staley & Wynne 1 ..... 200
———, Sun Oil Co. 1 ..... 250

**JIM HOGG COUNTY**

Holbein, K. & S. 32 ..... 800
Merchant, Magnolia Pet. 6 ..... gas
Randado, Houston-Gulf Gas 5 ..... 250
———, Black & Hudson 1 ..... 100

**WEBB COUNTY**

Puigg, Three Rivers Oil 5 ..... 1000
Aviator, Staley and Wynne Oil 3 ..... 500

**JIM HOGG COUNTY**

Holbein, K. & S. 34 ..... gas
Wells completed 20; production 6,400; gas 6; saltwater 1.

**SOMERSET**

Weimer, Helvetia Oil 8 ..... 10
Smith, Helvetia Oil 8 ..... 10
Wells completed 2; production 20.

**ROCKDALE-MINERVA**

Coulter, Clear Lake Oil 10 ..... 15
Phillips, Texas Pet. 12 ..... 20
Branch, Jennings Oil 14 ..... 20
Wells completed 3; production 55.

**MISCELLANEOUS**

**Medina County—**
———, Henderson & Holden 2 ..... gas
**Zavalla County—**
Pryor, Continental Oil 1 ..... sulph
**Fayette County—**
Near Flatonia, Red Bank Oil 1 ..... abd
**Guadalupe County—**
Glenwinckie, The Texas Company 1 .. abd
**Nueces County—**
———, The Texas Company 1 ..... abd
**Travis County—**
———, Gulf Prod. 1 Carlson ..... abd

**LULING**
**Wells Drilling**
Moore, United Oil & Gas 15.
Baker, United Oil & Gas 32, 33.
Kelly, United North and South 1.
Wells drilling 4.

**SOMERSET**
**Rigs**
Langley, Witherspoon Oil 10.
**Wells Drilling**
Langley, Witherspoon Oil 7.
Hart, Grayburg Oil 20.
Rigs 1; wells drilling 2; total 3.

**ROCKDALE-MINERVA**
**Rigs**
Branch, Jennings Oil 15.
Coulter, Clear Lake Oil 12.
**Wells Drilling**
Coulter, Clear Lake Oil 11.
Sterrisky, Union Prod. 4.
Sapp, Alexander & Lyles 1.
Phillips, Texas Pet. 13.
Gaither, Chicago Oil & Land 5.
———, Roy Anderson 2, 3.
Rigs 2; wells drilling 7; total 9.

**LOCKHART**
**Wells Drilling**
Brewer, Witherspoon Oil 12.
Wells drilling 1.

**MIRANDO**
**Rigs**

**RANDADO COUNTY**
**Rigs**
Palacios, Houston-Gulf Gas 8, 9.
Holbein, K. & S. Co. 37, 38.
Hinant, O. W. Killiam 2.
Hinant, Simms Oil 3, 4.
P. Holbein, Houston-Gulf G. 3.
———, Magnolia Pet. 6.

**COLE COUNTY**
Cole Pet. 21, 22.
Bruni, Cole Pet. 7.

**RANDADO COUNTY**
**Wells Drilling**
Palacios, Houston-Gulf G. 6, 7.
Holbein, K. & S. Co. 36.
Merchant, Magnolia Pet. 5, 7.
Cole, Cole Pet. 23, 24, 25.
Cole Pet. 10-A., 9.
Block 13, Black & Hudson 1.
Block, Morgan Oil 1.
Allen, Benedum & Trees 1, 2, 3.

**JIM HOGG COUNTY**
Max Buffum 2.
Holebin, Crown Central Pet. 1.

**WEBB COUNTY**
Block 43, Crown Central 9.
Block 44, Associated Oil 5.
Block 10, Simms Pet. 3.
Block 18, Staley & Wynne 4.
Block 16, Crown Central Pet. 1.
Block 46, Duke, Phillips & Morgan 1.
Block 53, Geo. Echols 1.
Block 19, Stubbs & Stubbs 1.
Block 18, Ruthada Oil 1.
Webster, Associated Oil 2.
Benavidas, United States O. & G. 1.
Block 12, J. H. Winch 1.
Survey 51, Sterling et al 1.
Survey 52, O. W. Killam 1.
Edington District, Ramsland et al 1.
Edington District, Layne Bros. 1.
Edington District, Perkins & Hill 1.
Edington District, Laredo Oil 12.
Cole-Buni, Barclay & Meadors 2.
Cole-Bruni, Ayers, Gibson Oil 1.
Cole-Bruni, Houston Oil 5.
Rigs 12; wells drilling 34; total 46.

## GULF COAST FIELDS

**Summary of Field Operations**

| District— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Boling | 9 | 4,695 | 2 | 0 | 12 | 16 | 28 |
| Batson | 4 | 223 | 0 | 0 | 2 | 3 | 5 |
| Blue Ridge | 1 | 175 | 0 | 0 | 0 | 2 | 2 |
| Big Creek | 2 | 150 | 1 | 0 | 0 | 2 | 2 |
| Barber Hill | 2 | 900 | 0 | 0 | 2 | 0 | 2 |
| Dayton | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Edgerly (La.) | 2 | 0 | 2 | 0 | 1 | 3 | 4 |
| Goose Creek | 5 | 300 | 3 | 0 | 3 | 10 | 13 |
| Humble | 1 | 0 | 1 | 0 | 0 | 5 | 5 |
| Hull | 16 | 6,355 | 6 | 0 | 6 | 16 | 22 |
| High Island | 3 | 550 | 1 | 0 | 1 | 3 | 4 |
| Jennings,, La. | 2 | 600 | 0 | 0 | 0 | 3 | 3 |
| Lockport, La. | 3 | 0 | 3 | 0 | 3 | 5 | 8 |
| Markham | 1 | 0 | 0 | 1 | 0 | 2 | 2 |
| Nash Dome | 3 | 2,700 | 0 | 1 | 0 | 3 | 3 |
| Orange | 14 | 2,160 | 7 | 0 | 3 | 13 | 16 |
| Pierce Jct. | 3 | 625 | 1 | 0 | 0 | 3 | 3 |
| Piedras Pintas | 2 | 0 | 2 | 0 | 1 | 2 | 3 |
| Spindletop | 5 | 12,110 | 0 | 0 | 2 | 4 | 6 |
| Saratoga | 4 | 225 | 0 | 0 | 0 | 2 | 2 |
| Sour Lake | 5 | 1,348 | 0 | 0 | 3 | 4 | 7 |
| South Liberty | 1 | 15 | 0 | 0 | 1 | 3 | 4 |
| Vinton, La. | 3 | 160 | 2 | 0 | 1 | 6 | 7 |
| W. Columbia | 1 | 0 | 1 | 0 | 0 | 1 | 1 |
| Miscel. | 10 | 0 | 9 | 1 | 12 | 55 | 67 |
| Tlt. May | 102 | 33,291 | 41 | 3 | 53 | 168 | 221 |
| Ttl. April | 87 | 48,310 | 26 | 0 | 66 | 176 | 242 |
| Difference | 15 | 15,019 | 15 | 3 | 13 | 9 | 21 |

**WELLS COMPLETED**

**BOLING**
Floyd, Oxford Oil 3 ..... 3500
Hawes, Humble-Gulf 2 ..... 10
Fletz, Jas. Weed 5 ..... 200
Taylor, Sinclair O. & G. 3 ..... 385
Taylor, Sun Oil 2 ..... 50
Taylor, Atlantic Oil Prod. 4 ..... 350
Mick, Gulf Prod. 1 ..... abd
Mullins, J. K. Hughes Dev. 1 ..... abd
Hawes, Humble-Gulf 4 ..... 200

Wells completed ..... 9
Production ..... 4695
Abandoned ..... 2

**BATSON**
Hooks, Sterling Oil 4 ..... sw.
Wing, Gulf Prod. 167 ..... 20
Hodges, Kirby Pet. Capitol Oil 4 (wo) 200
Milhome, S. R. Buchanan 87 ..... 3

Wells completed ..... 4
Production ..... 223

**BLUE RIDGE**
Robinson, The Texas Co. 10 ..... 175

**BIG CREEK**
Wheat, Gulf Prod. 10 ..... abd
Davis, Gulf Prod. 28 ..... 150

Wells completed ..... 2
Production ..... 150

**BARBER HILL**
Japhet, M. Bennett 5 (wo) ..... 300
Barber, Bennett Prod. 1 ..... 600

Wells completed ..... 2
Production ..... 900

**EDGERLY**
Moore, Green Oil 7 ..... sw.
Hunter, Rex Oil 2 ..... sw.

**GOOSE CREEK**
Smith, Humble Oil & Refg. 67 ..... sw.
Chapman-Bryan, Gulf Prod. 11 ..... abd
Smith, Humble O. & R. 9 (wo) ..... 200
Peninsula, Humble O. & R. 22 ..... sw.
Bryan, L. G. Marshall 3 ..... 100

Wells completed ..... 5
Production ..... 300
Abandoned and salt water ..... 3

**HULL**
Phoenix, Gulf Prod. 66 ..... 1100
Phoenix, Gulf Prod. 65 ..... 500
Phoenix, Gulf Prod. 67 ..... 2500
Phoenix, Gulf Prod. 27 (wo) ..... 1500
Dolbear, Republic-Houston Oil 123 ..... 30
Dolbear, Republic- Houston Oil 120 ..... 125
Dolbear, Republic-Houston Oil 125 ..... 200
Dolbear, Republic-Houston Oil 124 ..... sw.
Thomas, Gulf Prod. 3 ..... sw.
Merchant, The Texas Co. 10 ..... sw.
Abel, Houston Prod. 9 ..... 100
Guedry, Humble O. & R. 21 ..... 150
Sterling, Humble O. & R. 3 ..... sw.
Merchant, Humble O. & R. 6 ..... 150
Abel, Humble O. & R. 4-B ..... abd
Hannah, The Texas Co. 1 ..... sw.

Wells completed ..... 16
Production ..... 6355
Abandoned and salt water ..... 6

**HUMBLE**
Bailey, Hamm & Co. 1 ..... abd

**HIGH ISLAND**
Smith, Gulf Prod. 2 (wo) ..... 500
Cade, Sun Oil 6-C (wo) ..... 50
Lockhart, Sun Oil 8 ..... abd

Wells completed ..... 3
Production ..... 550
Abandoned ..... 1

**JENNINGS**
Latrielle, The Texas Co. 95 ..... 500
Jennings-Clement, Gulf Refg. 31 (wo) .. 100

Wells completed ..... 2
Production ..... 600

**LOCKPORT**
Miller, Vacuum-Gulf 7 ..... sw.
Miller, Vacuum-Gulf 8 ..... sw.
Miller, Vacuum-Gulf 9 ..... dry

Wells completed ..... 3
Dry and salt water ..... 3

**MARKHAM**
Gray, Houston-Gulf Gas 3 ..... gas

**NASH DOME**
D. Flessner, Rycade Pet. 2 ..... gas
Nash, Rycade Pet. 7 ..... 1500
Nash, Rycade Pet. 6 ..... 1200

Wells completed ..... 3
Production ..... 2700
Gas ..... 1

**ORANGE**
Chesson, Humble O. & R. 25-A ..... sw.
State land, Rycade Pet. 8-C ..... abd
Chesson, Texhoma Oil 4 ..... abd
Hager fee, Gulf Prod. 21 ..... 40
Hager, Atlantic O. P. 4 ..... 25
Chesson, Texhoma Oil 7 ..... 60
Kishi-Lang, Gulf Prod. 9-B ..... 1800
Myers, Humble O. & R. 5 ..... 10
McGuire, Kishi Dev. 7 ..... sw.
Peveto, Gulf Prod. 9 ..... 75
Berwick, Orange Pet. 1 ..... sw.
Chesson, Orange Pet. 12 ..... sw.
Jackson, Supreme Oil 1 ..... abd
Hager, Gulf Prod. 22 ..... 150

Wells completed ..... 14
Production ..... 2160
Abandoned and salt water ..... 7

**PIERCE JUNCTION**
Settegast, Rio Bravo Oil 2-P ..... 500
Taylor, Gulf Prod. 11 (wo) ..... 125
Cain, Navarro Oil 2 ..... sw.

Wells completed ..... 2
Production ..... 625
Salt water ..... 1

**PIEDRAS PINTAS**
Walsh, Humble O. & R. 1 ..... sw.
Hafft, Grayburg Oil 1 ..... abd

**SPINDLETOP**
McFadden, Yount-Lee Oil 5 ..... 5500
Higgins, Wilson & Broach 48 ..... 35
Gladys, Yount-Lee Oil 4 ..... 6500
Trembly, Baker Oil 15 ..... 25
National, Unity Oil 44 ..... 50

Wells completed ..... 5
Production ..... 12110

**SARATOGA**
Ogden, Paggi Bros. 3 ..... 15
Cotton, Rio Bravo Oil 4 ..... 40
Petty, Regna Oil 1 ..... 20
B-28, Rio Bravo Oil ..... 150

Wells completed ..... 4
Production ..... 225

**SOUR LAKE**
Fee, The Texas Co. 230 ..... 20
Bashara, Lake Graham Oil 7 ..... 10
Fee, Gilbert Oil 98 ..... 8
Gilbert, Yount-Lee Oil 3 ..... 1300
Fee, Minor Oil 77 ..... 10

Wells completed ..... 5
Production ..... 1348

**SOUTH LIBERTY**
Condit, Sinclair O. & G. 3 ..... 15

**VINTON**
Gray, The Texas Co. 1-C ..... abd
Vincent, Vinton Pet. 7 ..... abd
Parks, Wilson & Broach 1 (wo) ..... 160

Wells completed ..... 3
Production ..... 160
Abandoned ..... 2

**WEST COLUMBIA**
Le Rebus, Humble O. & R. 1 ..... abd

**MISCELLANEOUS**
**Brazoria Couty—**
Clements, Roxana Pet. 1 ..... abd
Allen, Roxana Pet. 2. ..... abd
**Fort Bend County—**
Davis, Gulf Prod. 10 ..... abd
**Harris County—**
Peggy Lake, Armstrong et al 2 ..... abd
**Jackson County—**
Drushell, Houston-Gulf Gas 3 ..... gas
**Jefferson County—**
Burrell, Gulf Prod. 1 ..... abd
**Liberty County—**
Moore, Sun Oil Co. 1 ..... abd
**Hardin County—**
Hawley, Texas Little Farms Assn. 1. abd

**SOUTH LOUISIANA**
**Cameron Parish—**
Hackberry, Yount-Lee Oil 5 ..... abd
**Iberia Parish—**
Salt Mine, United O. & G. Synd. 1.... abd

Wells completed ..... 10
Gas ..... 1
Abandoned ..... 9

**RIGS AND WELLS DRILLING**

**BOLING**
**Rigs**
Hooper, Vacuum Oil, 4, 5.
Taylor, Sinclair Oil & Gas 6.
Taylor, Sun Oil Co. 6, 7.
Farmer, The Texas Company 1.
Woodfin, Humphrey Corporation 1.
Hawes, Humble-Gulf Cos. 8, 11, 12, 13, 14.
**Wells Drilling**
Mick, Humphrey Corporation 1.
Hawes, Humble-Gulf Cos. 6, 7.
Floyd, Southern Exploration 4, 5.
Woodfin, Houston-Gulf Gas 1.
Taylor, Sinclair Oil & Gas 2, 5.
Taylor, Sun Oil Co. 3 sd.
Farmer, Sun Oil Co. 1.
Taylor, The Texas Company 5, 8, 9.
Felder, The Texas Co. 1.
Hooper, Vacuum Oil 1, 2.
Rigs, 12; wells drilling, 16; total, 28.

**BATSON**
**Rigs**
State line, East Batson Oil 13.
Hodges, Kirby-Capitol Oil 5.
**Wells Drilling**
Paraffine, Acorn Oil 55.
Choate, Gulf Prod. 60.
Wing, Gulf Prod. 103 (wo).
Rigs, 2; wells drilling, 3; total, 5.

**BLUE RIDGE**
**Wells Drilling**
West-Schenck, Abercrombie et al 1.
Blakely, Gulf Prod. 7-B.

**BIG CREEK**
**Wells Drilling**
Davis, Gulf Prod. 29.
Wheat, Gulf Prod. 11.

**BARBER HILL**
**Rigs**
Fisher, Bennett Prod. 2.
Barber, Kirby Pet. 1.

**DAYTON**
**Wells Drilling**
Fee, Old Colony Oil 15.
Schlender, Harrison Oil 2.

**EDGERLY**
**Rigs**
Hunter, Rex Oil 3.
**Wells Drilling**
Hunter, Rex Oil 2 drilling deeper.
Moore, Green Oil 7.
Bright, Penn, Gulf Refg. 31.
Rigs, 1; wells drilling, 3; total, 4.

**GOOSE CREEK**
**Rigs**
Peninsula, Humble O. & R. 17, 12 (wo).
Chapman-Bryan, Gulf Prod. 12.
**Wells Drilling**
Smith, Humble Oil & Refg. 67, 68.
Wright, Sun Oil Co. 8.
Scorrgea, M. & B. Oil 4.
Bryan, Powell Oil 6.
Hirsch, Gulf Prod. 5.
Wright, Gulf Prod. 7.
Beaumont, Gulf Prod. 33.
State land, Gulf Prod. 8.
Galliard fee, Gulf Prod. 12.
Rigs, 3; wells drilling, 10; total, 13.

**HUMBLE**
**Wells Drilling**
Perkins, Brane Oil 5.
Bailey, H. & W. Oil 2.
River, Sun Oil Co. 33.
Burt, Barclay & Meadows 5.
Horn, J. D. Clay 5.
Wells drilling, 5.

**HULL**
**Rigs**
Dolbear, Republic-Houston Oil 128.
Guedry, Humble O. & R. 22.
Merchant, Humble O. & R. 5.
Taylor, Mecom Oil 9.
Phoenix, Gulf Prod. 19 (wo) 68.
**Wells Drilling**
Dolbear, Republic-Houston Oil 124, 126, 127, 129.
Sterling, Humble O. & R. 3 drg. dpr.
Taylor, Mecom Oil 2.
Barnsgrover, Empire Gas & Fuel 19.
Palmer, Houston Prod. 6.
Hannah, The Texas Co. 1 drg. dpr.
Hannah, Texas-Vacuum Oil 2.
Merchant, The Texas Co. 10.
Scarborough, Gulf Prod. 17.
Morris-Phillips, Gulf Prod. 22.
J. C. Baldwin, Gulf Prod. 17.
Phoenix, Gulf Prod. 5 (wo).
Thomas fee, Gulf Prod. 3, drg. dpr.
Rigs, 6; wells drilling, 16; total, 22.

**HIGH ISLAND**
**Rigs**
Smith, Gulf Prod. 6.
**Wells Drilling**
Cade, Sun Oil Co. 8-C, 10.
Smith, Gulf Prod. 5.
McCarthy, Island Oil 1.
Rigs, 1; wells drilling, 3; total, 4.

**JENNINGS**
**Wells Drilling**
Jennings-Clement, Gulf Refg. 32.
Fee, Coastal Fuel Oil 98.
Latrielle, Etropal Oil 3.
Wells drilling, 3.

**LOCKPORT**
**Rigs**
Bordages, Vacuum-Gulf 3.
Miller, Vacuum-Gulf 10, 11.
**Wells Drilling**
Miller, Vacuum-Gulf 7, 8, 9.
Friedberg & Wolf, Vacuum-Gulf 1.
Farquhar, Vacuum-Gulf 3.
Rigs, 3; wells drilling, 5; total, 8.

**MARKHAM**
**Wells Drilling**
Kountz, Rycade Pet. 1.
Myers, Houston-Gulf Gas 3.

**NASH DOME**
**Wells Drilling**
Wisdom, Rycade Pet. 5, 6.
Flessner, Rycade Pet. 3.

**ORANGE**
**Rigs**
Peveto, Gulf Prod. 2 (wo).
Kishi-Lang, Gulf Prod. 11.
Chesson, Texhoma Oil 6 (wo).
**Wells Drilling**
McLean, Brownie Babbittee Oil 5.
Carbello, Rex Oil 4.
Chesson, Humble O. & R. 25 dpng.
McGuire, Kishi Dev. 7 dpng.
Williams, Orange Pet. 1.
Berwick, Orange Pet. 1 dpng.
State land, Rycade Pet. 4-E, 5-B.
Bellisle, Sun Oil 1.
Chesson, Texhoma Oil 14, 15.
Hager fee, Gulf Prod. 23, 3(wo).
Rigs, 3; wells drilling, 13; total, 16.

**PIERCE JUNCTION**
**Wells Drilling**
Settegast, P. F. 2, Rio Bravo Oil.
Cain, Navarro Oil 2 (wo).
Taylor, Gulf Prod. 13 (wo).
Wells drilling, 3.

**PIEDRAS PINTAS**
**Rigs**
Walsh, Humble Oil & Refg. 6.
**Wells Drilling**
Walsh, Humble O. & R. 5.
Haff, Magnolia Pet. 1.
Rigs, 1; wells drilling, 2; total, 3.

**SPINDLETOP**
**Rigs**
McFadden, Yount-Lee Oil 6.
Brown-Williams, Yount-Lee Oil 1.
**Wells Drilling**
Trembly, Porch & Telshaws 3.
Trembly, Seven Oil 1.
Garrick, Oil Barbee 1.
Gladys, Gulf Prod. 186.
Rigs, 2; wells drilling, 4; total, 6.

**SARATOGA**
**Wells Drilling**
Fountain, Rio Bravo Oil 5.
Teel, Vacuum Oil 3.

**SOUR LAKE**
**Rigs**
Jackson, Humphrey Corp. 2, 3.
Ten Acres, Sour Lake Oil 1.
**Wells Drilling**
Gilbert, Yount-Lee Oil 4.
Jackson, Humphrey Corp. 1.
Carpenter, Peveto Oil 12.
Libbie, Sun Oil 1.
Rigs, 3; wells drilling, 4; total, 7.

**SOUTH LIBERTY**
**Rigs**
Mitchell, Premium Oil 1.
**Wells Drilling**
Deussen, Humble O. & R. 1-B.
Welder, Humble O. & R. 2.
Lecourse, Coastal Oil 1, sd.
Rigs, 1; wells drilling, 3; total, 4.

**VINTON**
**Rigs**
Gray, Supreme Oil 1.
**Wells Drilling**
G. N. G., Gulf Refg. 68.
Gray, The Texas Co. 7.
Parks, Wilson & Broach 6.
Rescue, Vinton Pet. 19.
Gray, Vinton Pet. 28.
Gray, Gulf Refg. 4.
Rigs, 1; wells drilling, 6; total, 7.

**WEST COLUMBIA**
**Wells Drilling**
Arnold, The Texas Co. 22.

**MISCELLANEOUS**

**ANGELINE COUNTY**
**Wells Drilling**
Lufkin, Flanigan Drilling Co.

**BRAZORIA COUNTY**
**Rigs**
Bryan Hths, Hamm & Co. 2.
**Wells Drilling**
Allen, Roxana Pet. 3.
Kropp, Roxana Pet. 2.
Clements, Roxana Pet. 2.

**CHAMBERS COUNTY**
**Wells Drilling**
Drouth, W. C. Moore 1.
Wallisville Road, Young et al 1.
Lawrence, C. T. Tucker 1, 2 sd.

**FORT BEND COUNTY**
**Wells Drilling**
Davis, Long Point, Gulf Prod. 8, 10.
Frederick, Neilan, Inc., 2 sd.
———, Harry Pennington 1, sd.
Orchard, Gulf Prod. 6.

**HARRIS COUNTY**
**Rigs**
Spring Road, Brane Oil 1.
**Wells Drilling**
———, Vane Prod. 3.

**HARDIN COUNTY**
**Wells Drilling**
Weiss, Humble Oil & Ref. 2.

**JEFFERSON COUNTY**
**Wells Drilling**
Fannette, Bordages, Gulf Prod. 3.
Big Hill, Sun-Dyson, Houston Oil 4.

**JACKSON COUNTY**
**Wells Drilling**
Drushell, Drushell et al 3.

**GRIMES COUNTY**
**Wells Drilling**
Carlos, Newblock 1.

**KLEBERG COUNTY**
**Wells Drilling**
SW of Kingsville, Humble O. & R. 5.

**LIBERTY COUNTY**
**Wells Drilling**
Fevers, Campbell Co. 1.

**MATAGORDA COUNTY**
**Rigs**
Hawkins Dome, Pennington, Gulf Prod. 1.
**Wells Drilling**
Craig, Hawkins, Dome, Gulf Prod. 4.
Hawkins, Shepherd Mound Oil 2.
Sanborn, Gulf Prod. 1.

**NEWTON COUNTY**
**Wells Drilling**
Sabine Tram, Humble O. & R. 1.

**ORANGE COUNTY**
**Rigs**
Bessie Heighths, Gulf Prod. 2.
**Wells Drilling**
Gum Island, Orange Prod. 2 sd.
Deweyville, Humble O. & R. 2.

**REFUGIO COUNTY**
**Rigs**
Rooke, Houston Oil 6.
**Wells Drilling**
Hook, Houston Oil 5.
Rooke, Houston Gulf 6, 7.

**STARR COUNTY**
**Wells Drilling**
Kelsey, Dauchy & Bryant 1.
Guerra, O. W. Killiam 1 sd.

**NUECES COUNTY**
**Wells Drilling**
Allen, H. H. Grivans 1.

**WALLER COUNTY**
**Wells Drilling**
Near Walker, H. L. Maxwell 1 sd.
Pattison, George Newman 2.

**WASHINGTON COUNTY**
**Rigs**
West of Brenham, Pruitt et al 1.
**Wells Drilling**
Near Burton, Stengier et al 1 sd.
Sw Brenham, Fitzsimmons et al 3.

**SHELBY COUNTY**
**Rigs**
NW of Center, Fort Worth parties.

**Wells Drilling**
Shelbyville, Roy Anderson 1.
———, Crusader Oil 1 sd.
**WHARTON COUNTY**
Dennis, Humphrey Corp. 1.
**Wells Drilling**
Dennis, J. W. Rich 2.
Brown, J. W. Rich 1.
Woodbine, Houston-Gulf Gas 1.
Glen Flora, SaRoile Co. 1.
**SOUTH LOUISIANA**
**Calcasieu Parish—**
**Rigs**
McCoy, Union Sulphur Co. 2.
Stark Dome, Gulf Refg. 3.
**Wells Drilling**
Stark Dome, Standard Oil of La. 2 sd.
K. & M., Pool et al 1.
**Cameron Parish—**
**Rigs**
Sweet Lake, Pure Oil 4.
**Wells Drilling**
Hackberry, Yount-Lee Oil 5.
Sweet Lake, Pure Oil 3.
**Iberia Parish—**
**Wells Drilling**
Jefferson Island, Salt Nine, Union O. & G. 2.
**Jeff Davis Parish—**
**Rigs**
Kratzer, Osage Oil 1.
**Wells Drilling**
Ervine, Yount-Lee Oil 12.
McGure, Jeff Davis Oil 1.
**La Fourche Parish—**
Price, E. F. Simms 1.
**St. Mary Parish—**
**Wells Drilling**
Premier, Union Sulphur 10.
Glenwild, Rio Bravo Oil 1.
Veeder, J. Dennebaum.
**St. Martin Parish—**
**Wells Drilling**
Atchafalaya, Rycade Pet. 1.
Atchafalaya, Gulf Ref. of La. 2.
Martin, Ohio Oil 2.
**Scodia Parish—**
**Wells Drilling**
Regan, Ethopel Oil 4.
**Beauregar Parish—**
**Wells Drilling**
Hennigan, American Lumber Co. 1.
Rigs, 18; wells drilling, 55; total, 73.

## N. LOUISIANA-ARKANSAS

### NORTH LOUISANA

**Summary of Field Operations**

| Parish— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Bossier | 5 | 60 | 3 | 1 | 1 | 3 | 4 |
| Caddo | 20 | 2,364 | 1 | 2 | 3 | 42 | 45 |
| Caldwell | 0 | 0 | 0 | 0 | 1 | 2 | 3 |
| Claiborne | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| De Soto | 1 | 5 | 0 | 0 | 1 | 8 | 9 |
| Grant | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Monroe dist. | 7 | 0 | 1 | 6 | 6 | 14 | 20 |
| Sabine | 0 | 0 | 0 | 0 | 2 | 3 | 5 |
| Webster | 4 | 360 | 0 | 0 | 8 | 10 | 18 |
| Winn | 0 | 0 | 0 | 0 | 2 | 2 | 4 |
| La Salle | 63 | 14,770 | 9 | 0 | 17 | 40 | 57 |
| La. wildcats | 4 | 10 | 3 | 0 | 6 | 2 | 8 |
| Total May | 104 | 17,569 | 17 | 9 | 47 | 134 | 181 |
| Total April | 103 | 10,621 | 17 | 10 | 58 | 127 | 185 |
| Difference | 1 | 6,948 | 0 | 1 | 11 | 7 | 4 |

### ARKANSAS

**Summary of Field Operations**

| County— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Union | 107 | 11,574 | 9 | 4 | 33 | 81 | 114 |
| Ouachita | 17 | 1,070 | 3 | 1 | 3 | 19 | 22 |
| Nevada | 6 | 725 | 0 | 1 | 6 | 0 | 6 |
| Columbia | 2 | 38 | 0 | 0 | 3 | 5 | 8 |
| Ark. wildcats | 1 | 0 | 1 | 0 | 4 | 9 | 13 |
| Total May | 133 | 13,707 | 13 | 6 | 49 | 114 | 163 |
| Total Apr. | 141 | 17,092 | 27 | 6 | 36 | 128 | 164 |
| Difference | 8 | 3,385 | 14 | 0 | 13 | 14 | 1 |

**NORTH LOUISIANA**
**LaSALLE PARISH**
**Completions**
25-10-1e King, Abercrombie & Co., 4 . . . 50
25-10-1e King, Abercrombie & Co., 6 . . . 80
36-10-1e Tannehill, Arizola Pet. Co., 3 . . 200
25-10-1e Urania, Beckman et al, 7 . . . . . 75
26-10-1e State, Hunt et al 3 . . . . . 100
26-10-1e Tullos heirs, Hunt et al 9 . . . . . 80
26-10-1e Fee, Kimbrough and Willis 1 . . 60
26-10-1e Russell, Nat. Gas & Fuel Corp. B-1 . . . . . 75
26-10-1e H. Tullos, Natural Gas & Fuel Corp. 1 . . . . . 100
26-10-1e H. Tullos, Natural Gas & Fuel Corp. 2 . . . . . 65
26-10-1e H. Tullos, Natural Gas & Fuel Corp. 6 . . . . . 50
18-10-2e Urania, Natural Gas & Fuel Corp. B-1 . . . . . 100
25-10-1e Russell, Roberts et al 4 . . . . . 150
18-10-2e Wimbley, Sterling, Inc. 1 . . . . . 300
36-10-1e Tannehill, Arizola Pet. Co. 4 . . dry
13-10-1e Urania, Ayers et al 3 . . . . . 35
25-10-1e Urania, Beckman et al 6 . . . . . 40
23-10-1e Tullos, O. W. Clark 3 . . . . . 25
24-10-1e Urania, Dixie Oil Co. 5 . . . . . dry
7-10-2e Urania, B. & B. Drilling Co. 2 . 200
26-10-1e Tullos heirs, Hunt et al 8 . . . . 450
27-10-1e La. Central, S. S. Hunter 2 . . dry
19-10-2e Urania, Keene and Woolf 3 . . . 25
25-10-1e Russell, Keisker 1 . . . . . 30
26-10-1e H. Tullos, Natural Gas & Fuel Corp. 7 . . . . . 125
25-10-1e Russell, Sherman et al 2 . . . 1,500
25-10-1e Russell, Roberts et al 5 . . . . . 200
13-10-1e Urania, Standard Oil Co. 5 . . . . 40
36-10-1e King, W. & H. Oil Co. 1 . . . . . dry
8-10-2e Urania, Yeary and Bristol 1 . . 100
26-10-1e Smith, W. H. Bruckhartt 1 . . . . 800
26-10-1e Tullos heirs, Hunt et al 6 . . . . 600
18-10-2e Urania, Natural Gas & Fuel Corp. 3-B . . . . . 300
26-10-1e H. Tullos, George W. Wetherbee 1 . . . . . 100
36-10-1e King, O. F. Whittaker 3 . . . . . 150
26-10-1e Herbert, Williams Drilling Co. 1 . . . . . 100
36-10-1e Tannehill, Arizola Pet. Co. 5 . . 200
13-10-1e Urania, Standard Oil Co. 6 . . . dry
25-10-1e King, Abercrombie Co. 9 . . . . . dry
25-10-1e King, Abercrombie Co. 14 . . . . dry
18-10-2e Urania, Natural Gas & Fuel Corp. 2-B . . . . . 1,000
18-10-2e Urania, Natural Gas & Fuel Corp. 4-B . . . . . 350
18-10-1e Urania, Natural Gas & Fuel Corp. 1-E . . . . . 100
25-10-1e Kyle and Davis, Carlton and Tharpe 1 . . . . . 90
8-10-23 Urania, Carter and Hurley 1 . . dry
36-10-1e King, Explorers Oil Corp. 2 . . . 100
7-10-2e Urania, Hardtner Oil Co. 3 . . . . 300
26-10-1e State, Hunt et al 4 . . . . . 90
18-10-2e Winberry, Hunt, McCurry and Zoder 2 . . . . . 15
25-10-1e Russell, H. M. Jones 4 . . . . . 60
25-10-1e Norrid, Jones et al 1 . . . . . 80
25-10-1e Tremont, Louisiana Oil Refining Corp. 31-B . . . . . 250
25-10-1e Russell, McWilliams and Foster 2 . . . . . 100
26-10-1e Bryant and Harvey, Nelson et al 1 . . . . . 60
25-10-1e Russell, Roberts et al 6 . . . . . 60
26-10-1e Herbert, Williams Drilling Co. 4 . . . . . 50
19-10-2e Urania, Hope Oil Co. 1 . . . . . 3,000
25-10-1e Zimmerman, Love et al 3 . . . . 2,000
7-10-2e Urania, A. E. Hudson 3 . . . . . 200
35-10-1e Tremont, Louisiana Oil & Refining Co. 6-A . . . . . 80
18-10-2e Urania, Natural Gas & Fuel Corp. 2-E . . . . . dry
26-10-1e Herbert, Williams Drilling Co. 6 . . . . . 60
8-10-2e Urania, Yeary and Bristol 2 . . . 200

Completions . . . . . 63
Production . . . . . 14,770
Dry . . . . . 9

**BOSSIER PARISH**
23-19-11 Smith, Autrey et al 1-C . . . . . gas
25-16-12 Caplis, Palmer Corp. 10 . . . . . 60
18-19-13 Kilburn, Woodley & Collins 1 . . dry
15-19-11 Smith, Autrey et al 2 . . . . . dry
15-19-11 Smith, Autrey et al 1 . . . . . dry

Completions . . . . . 5
Production . . . . . 60
Gas . . . . . 1
Production . . . . . 500,000
Dry . . . . . 3

**CADDO PARISH**
33-21-16 Levee Board, The Texas Company 61 . . . . . 40
14-21-15 Murray, McGoldrich et al 8 . . . 6
12-21-15 Robertshaw, Dixie Oil Co. 75 . . 10
22-20-16 Ferry Lake, Gulf Ref. Co. 231 . . 60
15-20-16 Ferry Lake, Gulf Ref. Co. 232 . . 1,500
7-20-15 Davis and Butler, J. H. Askew et al 1 . . . . . 4
23-22-15 Worley, Dixie Oil Co. 6 . . . . . 13
16-20-16 Ferry Lage, Gulf Ref. Co. 230 . . 425
16-20-16 Ferry Lake, Gulf Ref. Co. 222 . . 25
14-21-15 Robertshaw, Dixie Oil Co. 74 . . 25
33-21-16 Levee Board, The Texas Company 60 . . . . . 40
27-21-16 Stiles, Standard Oil Co. 176 . . dry
12-21-15 Smith, Ohio Oil Co. 19 . . . . . 19
13-21-15 Lane, Arkansas Natural Gas Co. 1 . . . . . gas
23-22-15 Worley, Dixie Oil Co. 5 . . . . . 35
7-20-15 Muslow, Dixie Oil Co. 15 . . . . 12
16-20-16 Caddo, Gulf Ref. Co. 4-U . . . . 75
9-20-16 Caddo, Gulf Ref. Co. 5-U . . . . 60
21-15-12 Ellerbe, The Texas Company 1 . . gas
4-21-16 Harrell, The Texas Company 57 . . . . . 35

Completions . . . . . 20
Production . . . . . 2,364
Dry . . . . . 1
Gas . . . . . 2
Production . . . . . 49,500,000

**DE SOTO PARISH**
2-12-12 Wemple, The Texas Company 10-A . . . . . 5

**MONROE DISTRICT**
35-20-4e Cole, Central Co., Inc. 1 . . . . . gas
24-19-4e Fee, Palmer Corp. 2 . . . . . gas
36-16-17 La Grone, A. Meek, trustee 4 . . dry
24-20-4e Wilson, United Carbon Co. 1 . . gas
26-20-4e Cole, Palmer Corp. 2 . . . . . gas
36-19-4e Fee, Ladell et al 33 . . . . . gas
16-20-3e Thompson, Louisiana Power Co. 1 . . . . . gas

Completions . . . . . 7
Gas . . . . . 6
Production . . . . . 27,750,000
Dry . . . . . 1

**WEBSTER PARISH**
21-21-10 Tiner, Magnolia Pet. Co. 1 . . 125
21-21-10 Bodcau, Ohio Oil Co. 37 . . . . 100
21-21-10 Robbins, Alabama Pet. Co. 3-B . . . . . 60
21-21-10 Coyle, Gulf Ref. Co. 2 . . . . . 75

Completions . . . . . 4
Production . . . . . 360

**LOUISIANA WILDCATS**
27-18-1w Tremont, The Texas Company 1 . . . . . dry
18-19-1e Swope, Dowling and McCurry 1 . . . . . 10
34-10-1w L. & A., Humble Oil & Refining Co. 1 . . . . . dry
24- 4-12 Drake, Toro Pet. Co. 2 . . . . . dry

Completions . . . . . 4
Production . . . . . 10
Dry . . . . . 3

**Bossier Parish—**
**Wells Drilling**
9-22-11 Bollinger, Doern et al 1.
14-23-12 L. & A., Woodley and Collins 1.
14-19-11 Larkin, R. L. Crook 4.
**Shut Down**
14-23-14 Murray, Arkansas Fuel Oil Co. 1.
9-20-13 Buckley, Benton Syndicate 1.
13-20-12 Weaver and Rivers, No-Bo Fuel Syndicate 1.
17-18-11 Hale and Rumbough, Square Deal Oil Co. 1.
23-19-11 Strange, Olmstead et al 10.
**Rigs**
17-18-11 Burchkalter, Henderson et al 1.
Wells drilling, 3; shut down, 5; rigs, 1.
**Caddo Parish—**
**Wells Drilling**
34-21-16 State, W. D. Chew 3.
27-22-15 Jolly, Dixie Oil Co. 1.
7-20-15 Muslow, Dixie Oil Co. 16.
14-21-15 Robertshaw, Dixie Oil Co. 71.
17-21-14 Sellington, Gilliam Syndicate 1.
15-21-16 Burglass, Galloway et al 1.
2-19-14 Byrd, Gulf Ref. Co. 1.
16-20-16 Ferry Lake, Gulf Ref. Co. 233, 236, 237, 242.
15-20-16 Ferry Lake, Gulf Ref. Co. 234, 235, 240, 241.
21-20-16 Ferry Lake, Gulf Ref. Co. 238.
22-20-16 Ferry Lake, Gulf Ref. Co. 239.
13-21-15 Lane, Gulf Ref. Co. 17.
35-21-15 Muslow, Gulf Ref. Co. 1-E.
14-21-15 Tyson, Gulf Ref. Co. 12.
22-21-15 Raines, Lewis Oil Corp. 14.
5-20-15 Doan Thigpen, Magnolia Pet. Co. 15.
24-21-15 Dillon, Magnolia Pet. Co. 16, 17.
29-21-15 Spell, Magnolia Pet. Co. 1.
24-21-15 Bradford, Magnolia Pet. Co. 1.
22-21-15 Raines, Magnolia Pet. Co. 22.
1-21-15 Ardis, Ohio Oil Co. 1.
12-21-15 Smith, Ohio Oil Co. 18.
10-20-16 Satterwhite, Oil City Oil Co. 2.
29-21-15 Hobbs, Page and Caldwell 1.
23-22-15 Caddo, S. L. Ricketts 12.
13-20-15 Youree, Standard Oil Co. 1.
13-20-15 Youree-Randolph, D. C. Richardson, 13.
23-21-15 C. M. L. Co., The Texas Company 42, 47.
15-20-16 F. J. Bayou, The Texas Company 2-B.
12-21-16 Harrell, The Texas Company 52.
33-21-16 Mason fee, The Texas Company 4.
15-21-15 Raines, The Texas Company 18.
14-21-15 Huckaby, Tholl Oil Co. 8.
35-16-12 Knight, Woodley Pet. Co. 2.
**Rigs**
2-20-16 Dambley, H. P. Burford 1.
22-21-15 Raines, Lewis Oil Corp 15.
14-21-15 Herold, The Texas Company 7.
**Shut Down**
24-22-15 Hardeman, H. J. Bussa 1.
9-19-16 L. L. S. & P. Co., Haynes Bros. 1.
29-22-15 Caldwell, Henderson et al 1.
15-17-14 Cunningham, Manie Drilling Co. 1.
3-15-15 Williams, Ridge Oil Corp. 1.
34-21-16 Hart, Standard Oil Co. 11.
15-20-16 Bayou, The Texas Company 1-B.
Drilling, 42; rigs, 3; shut down, 7.
**Caldwell Parish—**
**Wells Drilling**
10-11-2e La. Central, Cherokee Pet. Co. 1.
6-12-4e Lively, Charles Daniels 1.
**Shut Down**
6-11-4e Cruse, Grant and Pipes 1.
30-11-4e Cruse, Standard Drilling Co. 1.
16-11-2e Love, Wright et al 1.
**Rigs**
10-11-4e Beasley, T. K. Robbins 1.
Drilling, 2; shut down, 3; rigs, 1.
**Claiborne Parish—**
**Wells Drilling**
28-19- 5 Beard, Brown et al 1.
14-23- 8 Taylor, Gilliland and Ramsey 1-D.
32-23- 5 Hollayfield, Triangle Drlg. Co. 1.
7-19- 5 Keen, Triangle Drlg. Co. 1.
**Shut Down**
7-19- 5 Cox, Triangle Drilling Co. 1.
Drilling, 4; shut down, 1.
**De Soto Parish—**
**Wells Drilling**
9-12-11 Jenkins, Dixie Oil Co. 1.
15-12-14 L. L. & D. Co., J. P. Evans 1.
20-12-14 Sutherlin, J. P. Evans 1.
27-12-11 Bond, Magnolia Pet. Co. 1.
34-12-16 Cody, Ohio Oil Co. 1.
29-12-11 Matthews, A. H. Tarver 4.
18-12-12 Heard, L. V. Ulrey 1.
36-12-11 Chaffraix, J. C. Walton 1.
**Shut Down**
29-15-14 Williamson, Carl K. Dresser 1.
**Rigs**
36-12-11 Harp, J. C. Walton 2.
Drilling, 8; shut down, 1; rigs, 1.
**Grant Parish—**
**Wells Drilling**
13- 8-1w Ball and Cody, Finn et al 5.
32- 7-1w Ball, Finn and Hurdley 1.
18- 9-1e Swope, Gulf Ref. Co. 1.
3- 9-2w L. & A., Humble Oil & Ref. Co. 3.
**Shut Down**
16- 9-1e Holmes, Bradley and Cozart 1.
20- 9-1e Holmes, Dowling and McCurry 1.
3- 9-1w L. & A., Humble Oil & Ref. Co. 2.
Drilling, 4; shut down, 3.
**Monroe District—**
**Wells Drilling**
11-21-7e Sullivan, Bosseau et al 1.
1-18-4e Edwards, J. M. Huber 2.
32-19-3e D'Arbone, Sam D. Hunter 1.
17-18-4e Ouachita, G. E. Jordan 1.
20-19-4e McErwin, Maury Drilling Co. 3.
6-19-4e McKenzie, McKenzie et al 1.
24-19-4e Fee, Palmer Corp. 3.
36-20-4e Milsap, Palmer Corp. 1.
17-18-4e Nolan, Pioneer Oil & Gas Co. 1.
24-20-4e Wilson, United Carbon Co. 2.
35-19-4e Fee, Southern Carbon Co. 48.
14-20-1e Reeves, Arkansas Fuel Oil Co. 1.
18-23-1e Frost-Johnson, Clark Creek Oil Co. 1.
28-21-4e Grayling, Southern Carbon Co. 4.
**Shut Down**
27-23-5e Crossett, Natural Gas Prod. Co. 18.
23-15-3e Cordell, Culver et al 1.
24-18-3e Goodwin, Dickson and Frue.
**Rigs**
12- 9-4e Kerr, Central Co., Inc. 1.
36-19-4e Banks, J. M. Huber 3.
1-19-4e Central, Palmer Corp. 1.
25-20-4e Milsap, Palmer Corp. 2.
21-21-4e Grayling, Southern Carbon Co. 5.
32-21-4e Grayling, Southern Carbon Co. 2-B.
Drilling, 14; shut down, 3; rigs, 6.
**Sabine Parish—**
**Wells Drilling**
9- 7-12 Bowman, L. M. Emlet 5.
14- 7-14 Bowman, L. M. Emlet 7.
24- 5-9w Peavy-Wilson, J. B. Greer 1.
**Shut Down**
8- 7-12 Bowman, L. M. Emlet 6.
**Rigs**
8- 7-13 Sabine, L. M. Emlet 1.
11- 5-9w Peavy-Wilson, J. B. Greer 2.
Drilling, 3; shut down, 1; rigs, 2.
**Webster Parish—**
**Wells Drilling**
21-21-10 Robbins, Alabama Pet. Co. 4-B.
22-21-10 Cox, Humble Oil & Ref. Co. 1.
21-21-10 Crichton, Louisiana Oil & Ref. Co. 4.
8-20- 9 Bible, Magnolia Pet. Co. 1.
21-21-10 Turner, Magnolia Pet. Co. 1, 2.
23-21-10 Cox, Ohio Oil Co. 1.
23-21-10 Holloway, Ohio Oil Co. 3.
29-33-11 Oakley, Smitherman and McDonald 1.
1-22-10 Munn, Smitherman and McDonald 1.
**Shut Down**
13-21-10 Bodcau, Humble Oil & Ref. Co. 5-B.
15-20-10 Hortman, McDowell et al 1.
27-21-10 Josey and Massey 1.
**Rigs**
28-21-10 Nelson, Louisiana Oil & Ref. Co. 3.
32-23- 9 Sexton, Magnolia Pet. Co. 1.
22-21-10 Banks, Ohio Oil Co. 2.
15-21-10 Bodcau, Ohio Oil Co. 32.
26-21-10 Gray, Ohio Oil Co. 3.
23-21-10 Holloway, Ohio Oil Co. 2.
28-21-10 Gleason, Tidal Oil Co. 2.
26-21-10 Gray, Woodley Pet. Co. 4.
Drilling, 10; shut down, 3; rigs, 8.
**Winn Parish—**
**Wells Drilling**
1- 9-3w Edenborn, Humble Oil & Ref. Co. 1-B.
21-12-3w Radesecich, Keene and Woolf 1.
**Shut Down**
6-10-2w Sullivan, Cedar Creek Pet. Co. 1.
13-11-1e Urania, Cherokee Pet. Co. 1.
6-10-2w Eagles, J. H. Hall 1.
24-13-1e La. Central, C. H. Wilson 1.
**Rigs**
12- 9-1w L. & A., Humble Oil & Ref. Co. 7.
8- 9-3w Edenborn, Hunt et al 1.
Drilling, 2; shut down, 4; rigs, 2.
**LaSalle Parish—**
**Wells Drilling**
25-10-1e King, Abercrombie and Co. 7, 15.
36-10-1e Tannehill, Arizola Pet. Co. 6, 7.
26-10-1e Holmes, Bailey et al 1.
7-10-2e Urania, Carter and Hurley 1-B.
19-11-3e La. Central, Cherokee Pet. Co. 2.
25-10-1e Bass, O. W. Clark, trustee 2.
26-10-1e Herbert, Cox et al 1.
26-10-1e Fee, Cox et al 1.
25-10-1e Tullos, Daniels et al 2.
24-10-1e Urania, Dixie Oil Co. 6.
25-10-1e King, J. Q. Graves 1.
26-10-1e Volk, Hamilton and Musick 2.
8-10-2e Urania, Hardtner Oil Co. 4.
26-10-1e Tullos heirs, H. L. Hunt 10.
19-10-2e Urania, Keene and Woolf 4.
30-10-2e Tremont, Louisiana Oil & Ref. Corp. 1-B, 32-B.
4- 9-2e Tremont, Louisiana Oil & Ref. Corp. 7-A.
26-10-1e Ratcliff, Little River Oil Co. 1.
11- 9-1e Zenoria, Montague Oil Co. 1.
26-10-1e Russell, Mistrot et al 1.
18-10-2e Urania, Natural Gas & Fuel Corp. 6-B, 5-B, 7-B, 8-B, 9-B.
24-10-1e Urania, Ohio Oil Co. 3.
16-10-2e Urania, Ohio Oil Co. 7, 8.
26-10-1e Fee, L. E. Ozley 2.
25-10-1e Russell, Sherman et al 3, 4.
8-10-2e Urania, Shreveport Oil Corp. 1.
22-10-2e Hardtner, H. R. Smith 1.
18-10-2e Winberry, Sterling, Inc. 2.
25-10-1e Norrid, George W. Wetherbee 3.
36-10-1e King, O. F. Whittaker 4.
26-10-1e Herbert, Williams Drilling Co. 5.
**Shut Down**
26-10-1e Herbert, Cox et al 2.
8-10-2e Hardtner-Tannehill, Degman and Youngblood, 1
25-10-1e Tremont, Louisiana Oil and Refining Corp., B-10; B-12.
25- 9-2e Cotton, Minnesota Oil Corp. 1.
**Rigs**
36-10-1e Tannehill, Arizola Pet. Co. 8.
23-10-1e State, Beckham and Burckhartt, 1.
25-10-1e Odom, Carlton and Tharpe, 1.
33-10-3e La. Central, Cherokee Pet. Co. 2.
25-10-1e Russell, O. W. Clark, D-2.
27-10-1e Sanders, Dickerson et al., 1.
7-10-1e Urania, Hardtner Oil Co., 5.
26-10-1e Tullos Heirs, H. L. Hunt, 11.
7-10-1e Urania, Hunt, McCurry, Zoder 1.
24-10-1e Pendarvis, Ab Jones, 1.
25-10-1e Russell, H. M. Jones 3.
18-10-2e Urania, Natural Gas & Fuel Corp. E-3; E-4.
36-10-1e Cockerhan, Natural Gas and Fuel Corp., 1.
6-10-3e La. Central, Robinson and Long, 1.
19-10-1e Urania, Trio Oil Co., 2.
36-10-1e Doughty, Youngblood et al, 1.
Wells drilling, 40; shut down, 4; rigs, 17.
**SCATTERED WILDCATS**
**Wells Drilling**
8-14-3w Rodgers, El Dorado Chief Oil Co., 1.
4-11-6 Edenborn, J. F. Palmer, 1.
**Shut Down**
12-20-3w Davis, Buckley and Palmer, 1.
29- 5- 2e Barrow, Hincey and Make, 1.
3- 4- 3e Lanier, Wheeler and Wilbanks, 1.
24-12-11 Hollingsworth, Carnahan & Kyle 1.
Kyle, 1.
**Rigs**
3-20- 4w Cooper, Arkansas Fuel Oil Co., 1.
51-16-14e Yerger, Bannon et al., 1.
47- 7- 5 Guellat, Davidson et al., 1.
3-13- 7 Ayers, Forrest trustee, 1.
12- 4-1e Voda, F. Pacholik, 1.
13-11-10 Powell, Alden Oil Co., 1.
Wells drilling, 2; shut down, 4; rigs, 6.

**ARKANSAS**
**COMPLETIONS**
**UNION COUNTY**
17-17-16 White, Long et al., 2 . . . . . gas
9-17-16 Dumas, Magnolia Pet. Co., 3 . . 700
9-17-16 Slaughter, Atlantic Oil Prod. Co. 5 . . . . . 600
16-17-16 Andress, Atlantic Oil Pro. Co., B-1 . . . . . 100
9-17-16 Dumas, Magnolia Pet. Co., 4 . . 135
9-17-16 Slaughter, Magnolia Pet. Co., 3 . . . . . 135
9-17-16 Slaughter, Marine Oil Co., 6 . . 200
4-17-16 Slaughter, Owens et al., 2 . . 175
10-17-16 Dumas, Reliance Drilling Co., 1 . . . . . dry
16-17-16 Graham, Rovenger Oil Corp., 1 . . . . . 25
10-17-16 Dumas, Smith Oil Corp., 1 . . 50
9-17-16 Dumas, Wingfield et al., A-5 . . 200
9-17-16 Dumas, T. J. Woodley, 2 . . . . . 75
6-16-15 Hatfield, Sun Oil Co., 8 . . . . . 50
8-16-15 Bilyew, Woodley Pet. Co., 4 . . 150
15-16-15 Murphy, Eason et al., 7 . . . . . 150
15-16-15 Wells, Federal Pet. Co., B-2 . . 255
17-16-15 Sanford, Keever W. R., 6 . . . . . 75
8-16-16 Hessler, Magnolia Pet. Co., 3 . . 50
16-16-15 Cook, Simms Oil Co. 7 . . . . . 65
15-16-15 Murphy, Simms Oil Co., A-1 . . 100
11-17-16 Haney, McGaha et al., 1 . . . . . dry
9-17-16 Slaughter, Atlantic Oil Pro. Co., 6 . . . . . 700
16-17-16 Andress, Atlantic Oil Pro. Co. B-2 . . . . . 40
16-17-16 Graham, Atlantic Oil Pro. Co. 3 . . . . . abn. loc.
9-17-16 Slaughter, Humble Oil & Ref. Co., 2 . . . . . junked
21-17-16 Primm, Imperial O & G Co., 1 . . 25
16-17-16 Goodwin, Lion O. & R. Co., 3 . . 50
9-17-16 Slaughter, Miller and Cottingham, 4 . . . . . 200
16-17-16 Graham, Atlantic Oil Pro. Co., 1 . . . . . 25
4-17-16 Slaughter, Pure Oil Co., 1 . . 300
9-17-16 Dumas, Wingfield et al., A-4 . . 400
9-17-16 Slaughter, Wingfield et al., 4 . . 400
9-16-15 Murphey, Hollyfield et al., 2 . . 15
9-16-15 Palmer, Eason et al., 3 . . . . . gas
8-16-15 Murphy, Keever W. R., 6 . . . . . 65
17-16-15 LeCroy, Magnolia Pet. Co., 3 . . dry

7-16-15 Tatum, Magnolia Pet. Co. 3 75
6-16-15 Friend, Pure Oil Co., 9 .... 135
9-17-16 Slaughter, Magnolia Pet. Co., 5 .... 500
9-17-16 Dumas, Wingfield et al., A-7. 400
9-17-16 Slaughter, Wingfield et al., 10 300
16-17-16 Goodwin, Humble O. and Ref. Co., 1 .... 150
9-17-16 Slaughter, Humble Oil & Ref. Co., 1 .... 125
9-17-16 Slaughter, Magnolia Pet. Co. 2 360
4-17-16 Slaughter, Owens et al 3 .... 300
4-17-16 Flournoy, Roxana Pet. Co., 1. 300
4-17-16 Kilgoe, Bond and Evans, 2.. 60
16-17-16 Graham, Marine Oil Co., 1 .... abn. loc.
16-17-16 Graham, Marine Oil Co., 1.. 20
21-17-16 Murphy, Ohio Oil Co., 1 .... 20
15-17-16 Dumas, J. D. Reynolds 4 .... 20
9-17-16 Dumas, Simms, Oil Co., 3 .... 90
16-17-16 Perry, Simms Oil Co., 1 .... 5
16-17-16 Perry, Simms Oil Co., 2 .... 20
16-17-16 Perry, Simms Oil Co., 3 .... 60
17-16-15 Murphy, E. M. Jones, 2 .... 4
7-16-15 Murphy, Lion Oil & Ref. Co., A-6 .... abn. loc.
7-16-15 Murphy, Lion Oil & Ref. Co., A-9 .... abn. loc.
7-16-15 Murphy, Roxana Pet. Co., 4 .... abn. loc.
10-16-15 Lawton, Unity Pet. Co., 2 .... 60
16-16-14 Goodwin, Williams et al, 2.. dry
15-16-15 Murphy, Estes et al., 3 .... 65
9-16-15 Flenniken, Humble Oil & Ref. Co., B-3 .... gas
11-17-16 Burns, Thurman et al, 1 abn. loc.
28-16-16 Swilley, H. L. Hunt, 1 .... 66
1-16-17 Hodges, W. H. Gilliland, 2.. dry
16-17-16 Goodwin, Atlantic Oil Pro. 1 .... 60
9-17-16 Dumas, Magnolia Pet. Co., 7 300
9-17-16 Slaughter, Marine Oil Co., 6.. 100
9-17-16 Slaughter, Marine Oil Co. 7.. 150
4-17-16 Slaughter, Owens et al., 4.... 50
9-17-16 Dumas, Pure Oil Co., 3 .... 35
9-17-16 Dumas, Rovenger Oil Corp., 6 50
16-17-16 Graham, Rovenger Oil Corp. 2 .... 25
4-17-16 Flournoy, Roxana Pet. Co., 2 125
4-17-16 Flournoy, Roxana Pet. Co., 3 190
3-17-16 Slaughter, Southern C. O. P. Co., 1 .... 35
10-17-16 Dumas, Stock et al., 1..... 8
9-17-16 Dumas, Wingfield et al., A-8 400
9-17-16 Slaughter, Wingfield et al., 7 75
9-17-16 Slaughter, Wingfield et al., 8 25
9-17-16 Slaughter, Wingfield et al, A-2 70
9-17-16 Dumas, T. J. Woodley, 3 .... 50
10-16-15 Lawton, Federal Pet. Co., B-6 65
18-16-15 Murphy, George and Jones, 5 dry
6-16-15 McClanahan, Standard Oil Co., 12 .... gas
1-16-16 McMullen, Gulf Ref. Co., 3.. dry
33-16-16 Murphy, H. L. Hunt, 1..... 8
4-16-16 Fee, C. L. Saxon 2 .... 125
5-16-16 Saxon, Smitherman and McDonald, B-2 .... 4
8-16-16 Fee, G. J. Childs, 2 .... 55
9-17-16 Slaughter, Humble Oil & Ref. Co., 2-A .... 75
9-17-16 Dumas, Magnolia Pet. Co. 8 250
16-17-16 Graham, Marine Oil Co., 2.. 30
9-17-16 Slaughter, Miller and Cottingham, 5 .... 70
9-17-16 Dumas, Roxana Pet. Corp. 1 33
4-17-16 Flournoy, Roxana Pet. Corp. 4 150
4-17-16 Kilgoe, Simms Oil Co., 1 .... 6
9-17-16 Dumas, Wingfield et al., A-9 250
9-17-16 Dumas, Wingfield et al., A-10 200
9-17-16 Slaughter, Wingfield et al., 9 35
31-17-15 Burns, Constant Ref. Co., 6.. 70
10-16-19 Lawton, Federal Petroleum Co., A-9 .... dry
6-16-15 McClanahan, Imperial Oil and Gas Co., 12 .... 50
10-16-15 Lawton, Mazda Oil Corp. B-2 50
17-16-15 Cook, Peer Oil Co., 1 .... 75

Completions .... 107
Production .... 11,874
Gas .... 4
Gas Production .... 69,000,000
Dry .... 9

### OUACHITA COUNTY

28-15-15 Hildebrant, Simms Oil Co., 10 100
27-15-16 Hick, Sunny Jim Oil Co., 3 .... 60
6-16-15 McClanahan, Imperial Oil and Gas Co., 7-A .... 80
17-12-17 Moline Tmb. Co., H. M. Harrell, 2 .... dry
29-15-15 Murphy, Standard Oil Co., B-8 200
22-15-19 Sawyer, J. D. Reynolds,1 .... gas
22-15-19 Davis, Buffalo Oil Co., 2.... 150
13-15-17 Smith, J. D. Reynolds, 1.... 10
29-15-16 Kyle, Gilliland Oil Co., 8.... 75
4-16-15 Umsted, Southern C. O. P. Co., 4-A .... 50
4-16-15 Umsted, Woodley Pet. Co., A-4 .... 75
21-15-19 Cosden, Gossett et al, 1 .... 65
31-15-19 Watson, Magnolia Pet. Co., 1 15
4-13-17 Higgins, Neibert et al, 1 .... dry
29-15-15 Goodwin, Ohio Oil Co., 6 .... 90
28-15-15 Brister, Pure Oil Co., 12 .... 100
22-15-19 Davis, J. D. Reyolds, 1 .... dry

Completions .... 17
Production .... 1,070
Dry .... 3
Gas .... 1
Production .... 8,000,000

### COLUMBIA COUNTY

36-15-20 Jones-Womack, J. E. Crosbie 2 .... 20
36-15-20 Jones-Womack, J. E. Crosbie 1 .... 18

Completions .... 2
Production .... 38

### NEVADA COUNTY

2-14-21 C. W. Waters, Smitherman and McDonald, 5 .... 150
1-14-21 Graves, Humble Oil and Ref. Co., B-1 .... 200
11-14-21 Waters, Keystone Oil Co., 9 .. 75
1-14-21 Haynie, Steele et al., 1 .... gas
2-14-21 Waters, Humble Oil and Ref. Co., 4 .... 100
1-11-21 Graves, Humble Oil and Ref. Co., A-4 .... 200

Completions .... 6
Production .... 725
Gas .... 1
Production .... 8,000,000

### ARKANSAS WILDCATS

29-15-14 Calion Lumber, Magnolia Pet. Co., 1 .... dry

### UNION COUNTY
#### Wells Drilling

4-17-16 Murphy, Allday Drilling Co., 1.
20-17-15 Rogers, Arkansas Drilling Co., 1
16-17-16 Andress, Atlantic Oil Pro. Co., B-3; B-4; B-5; B-6;.
16-17-16 Goodwin, Atlantic Oil Pro. Co., 8.
16-17-16 Graham, Atlantic Oil Pro. Co., 2.
4-17-16 Kilgore, Bond and Evans, 3.
8-16-15 Murphy, Broderick and Calvert, B-7.
9-18-17 Primm, Calgo Oil Co., 1.
8-16-16 Fee, G. J. Chiods, 3.
6-18-15 Robinson, Clark and Greer, 3.
7-16-15 Tatum, Sam Cook, 8.
34 17-15 Telford, Crestline Oil Co., 1.
15-16-15 Murphy, Eason et al., 8.
15-16-15 Murphy, Federal Petroleum Co., 3.
15-17-16 Mooty, Foster and McWilliams, 2.
28-16-16 Parks, Gaughan and Sifford, 1.
2-16-15 Alphin, Gulf Refining Co., 17.
14-16-15 Clawson, Gulf Refining Co., 2.
3-17-16 Slaughter, Hickman et al., 1.
10-16-15 Giller, Hollayfield et al, 13.
9-16-15 Flenniken, Humble Oil and Ref. Co., B-6.
16-17-16 Goodwin, Humble Oil and Ref. Co., 2; 5.
7-16-15 Lawton, Humble Oil and Refining Co. 2-B.
4-17-16 Murphy, H. L. Hunt, 1.
28-16-16 Swilley, H. L. Hunt, 2.
26-17-16 Goodwin, Imperial Oil and Gas Co., 1.
21-17-16 Primm, Imperial Oil and Gas Co., 2.
6-16-15 McClanahan, Imperial Oil and Gas Co., 8.
15-17-16 Harrell, Keisker et al, 1.
3-16-15 Williams, Kennebrew et al 7.
25-18-16 Coombs, Lion Oil & Ref. Co., 1.
10-16-15 Flenniken, Lion Oil & Ref. Co., 8.
17-17-16 White, Long and associates, 2.
7-16-15 Tatum, Magnolia Pet. Co., 4, 5.
8-16-16 Childs, Magnolia Pet. Co., 1.
9-17-16 Dumas, Magnolia Pet. Co., 5.
4-17-16 Harrell, Magnolia Pet. Co., 1.
7-16-15 Hatfield, Magnolia Pet. Co., 6.
9-17-16 Slaughter, Magnolia Pet. Co., 7, 8, 9.
10-16-15 Lawton, Mazda Oil Corp., R-4.
11-17-16 Haney, McGaha et al., 1.
5-16-15 Flenniken, Moco Oil Corp., 5.
17-16-15 Vestal, Murdock et al., 1.
2-19-18 Edwards, Moorefield et al., 1.
16-17-16 Andress, Natural Gas and Fuel Corp., 5.
17-16-15 Harrell, Natural Gas and Fuel Corp., A-4.
4-17-16 Willet, Natural Gas and Fuel Corp., 1.
21-17-16 Goodwin, Ohio Oil Co., 2.
4-17-16 Slaughter, Owens et al., 5.
9-16-15 Palmer, Peer Oil Co., 5.
17-16-15 Smith, Leo P. Pukrui, 2.
9-17-16 Dumas, Pure Oil Co. 4.
4-17-16 Slaughter, Pure Oil Co., 2, 3, 4.
10-16-15 Lawton, A. H. Ramage, C-6.
22-17-16 Mooty, Reynolds and Marr 1.
16-17-16 Goodwin, Rovenger Oil Corp., 5.
16-17-16 Graham, Rovenger Oil Corp., 3.
4-17-16 Flournoy, Roxana Petroleum Corp., 5.
9-16-16 Saxon, C. L. Saxon, B-1.
16-17-16 Perry, Simms Oil Co., 4, 5, 6, 7.
6-16-15 Flannigan, Sinclair Oil and Gas Co., 8.
3-17-16 Slaughter, Southern C. O. P., Co. 2.
6-16-15 McClanahan, Standard Oil Co., 11.
10-16-15 Lawton, Sunny Jim Oil Co., A-7.
8-18-15 Brown, Sun Oil Co., 9.
4 16-16 McElroy, Weiss and Simmons, 1.
9-17-16 Slaughterer, Wingfield et al., A-3, A-4.

#### Shut Downs.

8-18-12 Garner, Bonderant et al., 1.
8-16-15 Murphy, Broderick and Calvert, B-5.
34-16-16 Mathews, W. H. Harper, trustee, 1.
23-17-16 Ennis, Hatfield et al, 2.
36-17-16 Springer, Howell and Knowles, 2.
34-19-11 Townes, Kampeter et al., 1.
20-17-16 Mitchell, J. P. Kelly et al., 1.
10-16-15 Mazda Oil Corp., Lawton, R-6.
17-16-15 Vestal, Murdock et al., 7.
17-16-15 Harrell, Natural Gas and Fuel Corp., A-4.

#### Rigs

1-16-17 LaGrone, Arkansas Fuel Oil Co. 8.
16-17-16 Andress, Atlantic Oil Producing Co., B-7.
1-16-16 McDonald , F. A. Book, 1.
10-17-16 Dumas, Coats and Sowell, 2.
15-16-15 Murphy, Eason et al, 9.
30-19-14 Ford, Garrett et al, 1.
6-18-14 Alphin, Grimes and Jones, 1.
16-17-16 Goodwin, Humble Oil and Refining Co., 1, 4.
10-17-16 Slaughter, Humble Oil and Refining Co., 3.
27-16-16 Swilley, H. L. Hunt, 3.
21-17-16 Primm, Imperial Oil and Gas Co. 3.
10-16-15 Lawton, E. M. Jones, 2-A.
17-16-15 Murphy, E. M. Jones, 6.
15-17-16 Harrell, Keisker et al., 2.
9-17-16 Dumas, Magnolia Pet. Co., 2, 6.
9-17-16 Slaughter, Magnolia Pet. Co. 6.
9-17-16 Slaughter, Miller and Cottingham, 6.
5-16-15 Flenniken, Moco Oil Corp., 7, 9, 11.
21-17-16 Goodwin, Ohio Oil Co., 3.
4-17-16 Harrell, Pure Oil Co., 1.
16-17-16 Goodwin, Rovenger Oil Corp., B-2.
9-17-16 Dumas, Rovenger Oil Corp., 3.
16-17-16 Graham, Rovenger Oil Corp., 4.
15-17-16 Harrell, Rovenger Oil Corp., 2.
15-16-15 Murphy, Simms Oil Co., A-2.
3-17-16 Slaughter, Southern C. O. P. Co., 3.
3-17-16 Tooker, Southern C. O. P. Co., 1.
3-17-16 Slaughter, Wingfield et al., B-1.
4-16-15 Hays, Murdock et al., 8.

Wells drilling, 81; shut down, 10; rigs, 33.

### OUACHITA COUNTY

26-15-16 Arnold, Humble Oil and Refining Co., B-11.
30-15-16 Murphy, Magnolia Pet. Co., 2.
4-16-15 Hays, Marine Oil Co., 8.
29-15-15 Goodwin, Ohio Oil Co., 8.
9-14-17 Tate, Phillips Pet. Co., 1.
2-14-18 Ratch and Cartier, J. D. Reynolds 1.
28-15-15 Hildebrant, Simms Oil Co., 11.
29-15-15 Murphy, Simms Oil Co., 6.
36-15-17 Shirey, Smith Drilling Co., 3.
29-15-15 Murphy, Standard Oil Co., 9.
27-15-16 Hardin, Sun Oil Co., 6.
27-15-16 Hicks, Sunny Jim Oil Co., 1.
29-15-15 Murphy, Standard Oil Co., B-8.
22-14-17 Yarbrough, Vandiver et al 1.
4-16-15 Umsted, Woodley Pet. Co., 8.
22-15-19 Morgan, Buffalo Oil Co. 4.
31-15-19 Hall, El Dorado Union Oil Co., 1.
21-15-19 Dalton, S. S. Hunter est., 1.
31-15-19 Watson, Magnolia Pet. Co., 2.

#### Shut Down.

32-15-15 Bennett, Roxana Pet. Co., A-4.
33-15-15 Umsted, Standard Oil Co., 12.
32-15-15 Umsted, Standard Oil Co., B-5.
26-15-19 Davis, Gossett, et al., 1.
22-15-19 Thompson, Gossett et al, A-1.

#### Rigs

21-14-17 Reynolds, A. T. Grayson, 1.
27-15-16 Neeley, Texas Co., 7.
22-15-19 Green, Louisiana Oil and Refining Corp. 2.

Wells drilling, 19; shut down, 5; rigs, 3.

### NEVADA COUNTY
#### Wells Drilling.

(None).

#### Shut Down

10-14-21 Womack, Zing et al., 4.

#### Rigs

10-14-21 Womack, Autrey Oil Co., 3.
27-13-21 Whitehead, W. F. Furen, et al, 1.
10-14-21 Bodcau, Humble Oil and Refining Co., 4.
9-15-22 Groves, Humble Oil and Refining Co., C-1.
2-14-21 Waters, Humble Oil and Refining Co., 1.
1-14-21 Haynie, Webb et al, 1.

Wells drilling, 0; shut down, 1; rigs, 6.

### COLUMBIA COUNTY
#### Wells Drilling

36-15-20 Jones-Womack, J. E. Crosbie, 3.
36-15-20 Jones, Gorden et al., 1.
36-15-20 Jones, Gordon, Powell and Dickson, 2.
18-19-19 Wingfield, Haynesville Trust Co., 1.
6-18-20 Davis, Scott Phillips, 2.

#### Shut Down

13-15-20 Brown, R. W. Aarnes, 2.
29-19-20 Doss, Kentucky-Arkansas Petroleum Co., 1.
20-16-18 Watts, Miller et al 1.
23-18-23 Robinson, Pluto Oil Co. 2.
35-18-19 Duffer, Smith and Compton, 1.
4-26-21 Bodcau, Wingfield and Mitchell, 1.

#### Rigs

36-15-20 Jones, Gordon, Powell and Dickson, 3.
15-17-122 Gantt, Maier et al., 1.
20-18-122 Dickens, Pluto Oil Co., 1.

Wells drilling, 5; shut down, 6; rigs, 3.

### ARKANSAS WILDCATS
#### Wells Drilling

7-17-15 Fee, Pine Prairie Oil Co., 1.
1-16-14 Calion Lumber, Southern C. O. P. Co., 1.
35-10-20 Brown, Whelen Oil Co., 1.
29- 9-10 Moore, Haley et al., 1.
35-13- 5 Olga, McClintock and Goodka, 1.
18-19-24 Red River, Arkansas Fuel Oil Co., 4.
18-19-24 Allen, Arkansas Fuel Oil Co., 3.
10-11-31 Hawkins, Mellick Oil Co., 1
25-15-26 Dale, Lenze et al., 1.

#### Shut Down.

20-15- 7 Bledsoe, Rhodes and Kirker 1.
21-16-12 Brown, Easley et al., 1.
24-15-15 Freeman, Genther et al 1.
26-16-13 Freeman, Harris and Buckley, 1.
12- 9-20 Arnold, Virgil Heath trustee, 1.
29-10-16 Owens, McNell et al, 1.
23-10-25 Garland, Burton et al 1.
9-11-23 Sutton, Zing et al, 1.
7- 3-10 Hinsley, Decem Oil Co., 1.
7-19-24 Red River, Arkansas Fuel Oil Co., 3.
2-13-31 Allen, Grote et al, 1.

#### Rigs

31-10-10 Hall, Kingland Oil Co., 1.
8-18-24 Frazier, Bostic Drilling Co., 1.
4-13-21 Waldrop, Greason et al., 1.
10-14-21 Womack, Autrey Oil Co., 3.

## ROCKY MOUNTAIN AREA

### WYOMING

**Summary of Field Operations**

| District— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Big Muddy .. | 0 | 0 | 0 | 0 | 3 | 1 | 4 |
| Salt Creek .. | 41 | 4,242 | 2 | 0 | 17 | 57 | 74 |
| Lance Creek. | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Big Horn Basin ..... | 0 | 0 | 0 | 0 | 3 | 59 | 62 |
| Lost Soldier & Carbon Co. | 2 | 230 | 0 | 0 | 3 | 29 | 31 |
| Rock River district .... | 1 | 0 | 1 | 0 | 0 | 15 | 15 |
| Fremont Co.. | 0 | 0 | 0 | 0 | 1 | 36 | 37 |
| Osage ..... | 4 | 18 | 2 | 0 | 3 | 6 | 9 |
| Natrona Co... | 1 | 0 | 1 | 0 | 1 | 7 | 8 |
| Lincoln and Uintah Co.. | 1 | 0 | 1 | 0 | 2 | 31 | 33 |
| Baxter Basin. | 0 | 0 | 0 | 0 | 0 | 7 | 7 |
| Miscellaneous. | 0 | 0 | 0 | 0 | 2 | 32 | 35 |
| Total May.. | 50 | 4,490 | 7 | 0 | 35 | 281 | 316 |
| Total April. | 37 | 12,229 | 5 | 4 | 32 | 278 | 310 |
| Difference.. | 13 | 7,739 | 2 | 4 | 3 | 3 | 6 |

### MONTANA

| District— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Sunburst .... | 24 | 5,368 | 2 | 3 | 10 | 52 | 62 |
| Cat Creek and Miscellaneous | 0 | 0 | 0 | 0 | 5 | 82 | 87 |
| Total May.. | 24 | 5,368 | 2 | 3 | 15 | 134 | 149 |
| Total April | 30 | 4,604 | 6 | 3 | 15 | 129 | 144 |
| Difference.. | 6 | 764 | 4 | 0 | 0 | 5 | 5 |

### COLORADO

| District— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Total May .. | 10 | 4,480 | 1 | 0 | 14 | 102 | 116 |
| Total April .. | 10 | 0 | 10 | 0 | 19 | 103 | 122 |
| Difference.. | 0 | 4,480 | 9 | 0 | 5 | 1 | 6 |

### UTAH

| District— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Total May .. | 0 | 0 | 0 | 0 | 3 | 31 | 34 |
| Total April .. | 0 | 0 | 0 | 0 | 3 | 31 | 34 |
| Difference.. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

### NEW MEXICO

| District— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Total May .. | 23 | 955 | 11 | 0 | 14 | 130 | 144 |
| Total April .. | 27 | 1,395 | 9 | 0 | 15 | 137 | 152 |
| Difference.. | 4 | 440 | 2 | 0 | 1 | 7 | 8 |

### BIG MUDDY
#### Rigs

9-32-76 Texas Prod. Co.
8-33-76 Humphrey, Continental Oil Co.
3-34-36 Glenrock Synd.

#### Shut Down

3-24-76 Fenix, Continental Oil Co. 4.

Rigs 3, wells drilling 1; total 4.

### SALT CREEK
#### Rigs

13-39-79 SE Blackstone Salt Creek 4-F.
34-39-79 SW Mammoth Oil Co. 302.
34-40-78 NW Mammoth Oil Co. 305.
28-39-78 NW Mammoth Oil Co. 405.
28-39-78 NE Mammoth Oil Co. 406.
13-38-78 SW Wyoming Teapot Oil Co.
16-39-78 NE Nicholaysen et al.
19-40-79 NE Norris Oil Co. 18-A.
10-38-78 NW Mammoth Oil Co. 202.
9-39-78 NE Sinclair Wyoming 11.
6-39-78 NE Mt. and Gulf 29-A.
31-39-78 SE Teapot Dev. Co.
35-40-79 SE Midwest Oil Co. 31-A.
1-39-79 SE Continental Oil Co. 11-A.
6-39-79 NW Carter Oil Co. 12-D.
17-39-79 SE Argo Oil Co. 2-M.
8-39-78 NE Western States Oil & L. 21-A.

#### Wells Drilling

26-40-79 SE Wyoming Oil Fields 19-A.
23-40-79 SE Wyoming Oil Fields 4-L.
23-40-79 SW Wyoming Oil Fields 16-L.
26-40-79 NE Wyoming Oil Fields 3-L.
24-40-79 SE Wyoming Oil Fields 21-A.
23-40-79 SW Wyoming Asso. 19-L.
14-40-79 SE Wyoming Asso. 19-A.
23-40-79 SE Wyoming Oil Fields 19-A.
14-40-79 SW Wyoming Asso. 13-A.
24-40-79 NW Wyoming Asso. 22-A.
35-40-79 SW Wyoming Asso. 15-A.
26-40-79 NW Wyoming Asso. 13-A.
26-40-79 NE Wyoming Asso. 18-A.
14-40-79 SE Wyoming. 16-A.
22-40-79 SE Wyoming Asso. 22-A.
24-40-79 SE Wyoming Asso. 16-A.
11-39-79 NW Salt Creek Cons. 35-A.
12-40-79 SE Mt. and Gulf 8-A.
13-40-79 NE Mt. and Gulf 26-A.
14-40-79 SE Midwest Oil Co. 15-A.
26-40-79 SE Midwest Oil Co. 15-L.
27-40-79 NE Midwest Oil Co. 24-L.
2-39-79 NW Midwest Oil Co. 3-L.
23-40-79 NE Midwest Oil Co. 29-A.
14-40-79 NE Midwest Oil Co. 19-A.
35-40-79 NE Midwest Oil Co. 6-A.
12-40-79 NW Midwest & Wyo. Asso. 27-A.
25-40-79 NE Midwest & Wyo. 15-A.
25-40-79 NE Midwest & Wyo. Asso. 21-A.
36-40-79 NE Midwest Oil & Wyo. Asso. 8-A.
21-40-79 Meabon et al.
5-39-78 NW Western States O. & L. 29-A.
32-40-78 SW Continental Oil Co. 13-A.
2-39-79 NW Salt Creek Cons. 21-L.
32-40-78 SE Texas Prod. Co. 19-A.
28-40-79 SW Jupiter Oil Co. 34-S.
11-39-79 Middy. E. T. Williams 2.

#### Shut Down

23-40-79 SE Wyo. Oil Fields 6-L.
26-40-79 NE Wyo. Asso. 31-L.
26-40-79 SE Midwest Oil Co. 16-L.
23-40-79 NW Wyo. Oil Fields 36-L.
2-38-78 SE Staley-Foley Synd. 34-A.
35-39-78 SW Staley-Foley Synd. 15-A.
26-40-79 SE Wyo. Asso. 22-L.
10-40-79 SE Empire States Oil 25-A.
28-39-78 NE Mammoth Oil Co. 101.
29-39-78 NE Mammoth Oil Co. 108.
28-39-78 NE Mammoth Oil Co. 304.
28-39-78 SW Mammoth Oil Co. 302.
28-39-78 NW Mammoth Oil Co. 205.
4-38-78 NW Mammoth Oil Co. 101.
23-39-78 NE Evans Oil Co.
29-39-78 NE Omaha Lusk Oil Co.
6-39-79 NE Mt. and Gulf 34-A.
15-40-79 SE Prairie O. and G. 10.
32-40-78 SW Jupiter Oil Co. 27-A.
2-39-79 NW Midwest Oil Co. 15-L.

Rigs 17, wells drilling 57; total 74.

### LANCE CREEK
#### Shut Down

18-35-65 NE Union Oil Co.

Rigs 0, wells drilling 1; total 1.

### BIG HORN BASIN
#### Rigs

5-47-90 Hetzler, Ohio Oil Co. 1.
32-56-90 Howell, Occidental Oil & Gas.
5-42-90 Black Mt., Utah Oil & Refg. 2.

#### Wells Drilling

24-56-98 Garland, Prod. & Refs. 2.
21-53-101 Cody Oil & Gas 2.
11-48-90 Tensleep, Ohio Oil Co. 3.
7-54-90 Garry Oil & Dev. Co.
15-49-91 Shaffer & Tilley.
18-46-92 Washakie, Ohio Oil Co. 4.
18-44-93 West Zimmerman Butte Oil.
8-18-100 Union Oil Co.
20-52-101 NE Washington Oil & Gas.
1-44-102 T. N. Clark et al.
21-53-101 Guiterman et al.
14-48-102 Big Horn Basin Dev. Co.
21-53-101 Taylor Brothers.
7-46-92 Washakie, Ohio Oil Co. 2.
33-56-97 Cross Gas Co., Ohio Oil Co. 2.
5-51-97 SW M. Carroll et al.
9-54-94 SW Wisconsin-Hines Co.
15-44-95 SW F. L. Pierce.
19-54-93 SW Crystal Creek Synd.
32-47-100 NW Prairie Oil & Gas.
19-46-98 State, Ohio Oil Co. 41, 42.
3-56 98 Elk Butte Oil & Gas.
34-43-91 SE Union Oil Co. 1-A.
28-43-91 NW Union Oil Co. 1-A.
10-56-95 SE Allen Oil Co.
31-43-93 Utah Oil & Refg. Co. 3.
33-43-94 SW Wyoming Montana Oil Co.
17-46-98 Washakie, Ohio Oil Co. 1.

#### Shut Down

2-47-100 NE Midwest Refg. Co.
5-44-93 Royal Oil & Refg. Co.
29-56-97 NE Utah Southern Oil Co.
35-57-91 NE American Indian Oil Co.
4-51-100 Florence Oil Co.
3-55-97 Griffin, Allen Oil Co.
2-47-100 NE Midwest Refg. Co.
34-56-97 Linton, Allen Oil Co.
31-45-99 NW Kasoming Oil Co.
22-40-91 SW Olympus Oil Co.
17-49-91 Frontier Oil & Gas.
27-46-98 Rankin, Dickie Oil Co.
8-46-98 Grass Creek Prod.
3-56-90 Beck Pet. Co.
16-47-100 Big Horn Dev. Co.
19-51-92 Bruce Holding Co.
34-43-92 C. D. Markham et al.
10-54-95 SE Westland Oil Co.
35-55-95 Westland Oil Co.

20-54-100 NE Pittsgurgh-Southwestern.
5-43-91 SW Producers & Refs.
11-49-102 T. A. Stancliff.
11-49-102 Omar Oil & Gas.
36-58-100 Local Oil Co.
10-56-98 SE Victor Cotner.
18-46-98 Tumador Oil Co.
28-44-95 NE F. A. McPherson.
2-44-96 F. A. McPherson.
5-54-95 SW Royal Oil Co.
21-53-101 Cody Oil & Gas.
Rigs 3, wells drilling 59; total 62.

**LOST SOLDIER**
**Rigs**
24-21-88 E. R. Goode.
12-19-87 Marland Oil Co.
11-26-90 Prairie Oil & Gas 66-A.
**Wells Drilling**
11-26-90 Prairie Oil & Gas 35-A.
14-20-80 SE Lake Valley Oil Co.
16-26-88 General Pet. Co.
1-26-90 Producers & Refiners.
25-26-87 Producers & Refiners 17.
6-23-88 SE Prairie Oil & Gas 1.
6-23-88 Prairie Oil & Gas 1 and 2.
6-23-88 Prairie Oil & Gas 2.
3-26-90 SE Prairie Oil & Gas 70-A.
11-26-90 Prairie Oil & Gas 67-A.
28-26-88 Prairie Oil & Gas 1-B.
11-26-88 Prairie Oil & Gas 71-A.
11-26-90 Wyo. Ill., Prod. & Refs. 5.
35-26-88 Prod. & Refs. 3.
20-21-80 Prod. & Refs. 14.
**Shut Down**
3-26-90 Sand Hills Oil Co. 5.
28-26-88 Govt., Columbia Pet. Co.
4-26-90 SE Sand Hills Oil Co. 4.
23-26-87 SE Marvin Oil Co.
9-26-90 SE Major Oil Co.
26-25-89 NW E. R. Goode.
94-27-90 SW Annabelle Oil Co.
10-26-90 Prairie Oil & Gas 66.
28-26-86 Portland Wyoming 1 and 2.
21-26-86 Portland Wyoming 3.
9-21-84 St. Marys, Prod. & Refs. 36.
11-26-90 Prairie Oil & Gas 22.
Rigs 3, wells drilling 29; total 32.

**ROCK RIVER**
**Wells Drilling**
3-19-78 H. & C., Ohio Oil Co. 4.
2-19-78 H. & C., Ohio Oil Co. 11.
1-18-78 Dutton Creek, Midwest Refg. Co.
34-20-78 SW M. L. Lundy.
8-17-77 SE Texas Prod. Co.
13-17-77 SE Texas Prod. Co.
25-21-79 SE Southwestern Pet. Co.
34-23-79 Central Pipe Line Co.
**Shut Down**
10-18-77 Carbon County Oil Co.
12-20-77 McLaughin et al.
26-21-78 NW Southwestern Pet. Co.
12-16-79 SW G. A. Briggs.
34-23-79 NE Kanawha Oil & Gas.
23-21-79 SE Southwestern Pet. Co.
36-21-79 NW Southwestern Pet. Co.
Rigs 0, wells drilling 15; total 15.

**FREMONT COUNTY**
**Rigs**
20-33-94 Winter-Baker Ints.
**Wells Drilling**
14-32-95 Producers & Refs. 7.
10-32-95 Producers & Refs. 5.
30-2-2 Hudson, Prod. & Refs. 1.
17-27-95 Brimmer, Prod. & Refs. 1.
21-1-1 Bridger Oil Co.
24-32-95 Seal Oil Asso.
9-31-98 Martin F. Fold.
15-34-90 Ward Oil Co.
14-32-80 Meyers Pet. Co.
7-27-95 Van. Wyo., Prairie Oil & Gas 1.
13-28-93 Spencer et al.
10-28-92 SE Union Oil Co.
18-28-92 SE Producers & Refiners.
15-32-95 SE Texas Prod. Co.
27-6-3 SW Kinney Coastal Oil Co.
21-1-1 Wyoming Syndicate.
14-32-95 NW Riverton Pet. Co.
13-28-93 Producers & Refs. 2 and 3.
10-32-95 Producers & Refs. 5.
15-5-1 Carter, Union Oil Co.
**Shut Down**
36-37-94 Wyoming Syndicate.
6-6-2 SW Union Oil Co of Calif.
10-36-94 SW Myrin Oil Co.
18-26-95 Sage Creek Pet.
29-27-95 Fremont Pet. Co.
32- 6- 2 Miles City Oil Co.
3-1-2 NE Teton Pet. Co.
4-31-98 Derby Dome Oil Co.
9-32-95 NE Producers & Refs. 2.
4-31-98 Burnside Oil Co.
25-27-93 American Workers Oil (Zola)
15-32-95 NE Producers & Refs. 2.
15- 6- 2 SW Union Oil Co. 11 and 12.
7-27-95 Brimmer, Prairie Oil & Gas.
Rigs 1; wells drilling 36; total 37.

**OSAGE**
**Rigs**
30-46-63 NE Glenn Oil Co.
31-47-62 L. B. Hanson.
17-46-63 LaFleische.
**Wells Drilling**
Fawcett Ranch, Harry Briggs et al.
17-47-63 Wyoming Oil Co.
18-46-64 Fred Gravestead.
31-46-63 Tom Don Oil Co.
**Shut Down**
10-45-61 Lenhart & Briggs.
8-46-63 Griffith Oil Co.
Rigs 3; wells drilling 6; total 9.

**NATRONA COUNTY**
Mosher Dome, Mosher No. 5 Synd.
**Wells Drilling**
13-29-82 Chase, Ohio Oil Co.
3-37-85 Notches, Midwest Refg. Co.
32-38-83 Wilson Dome, Marland Oil Co.
**Shut Down**
**Shut Down**
15-32-82 Bessimer Bend Dev. Co.
5-39-80 NW Vernon Oil Co.
10-35-85 New York Oil Co.
Rigs 1; wells drilling 7; total 8.

**LINCOLN AND UINTAH COUNTIES**
**Rigs**
31-28-113 Tip Top Oil Co.
12-39-113 Cretaceous Oil Co.
**Wells Drilling**
14-21-117 NE Pioneer Oil Co.
30-15-118 NE Stanberg Pet. Co.
22-27-113 NW W. F. Akins.
26-27-113 NW Myrta Bennett.
17-27-113 SE Elkhorn Oil Co.
34-27-113 SW Beneficial Oil Co. 6.
Near Afton, Great Western Oil Co.
23-31-113 Three States Oil Co.
3-26-113 Superior Oil Co.
15-21-117 Pacific Properties Co.
6-15-118 Vulcan Oil Co.
7-28-114 Charles Lacky et al.
34-27-113 Wyotah Oil Co.
23-27-113 Fawcett Interests.
6-15-118 Olson Brothers.
Sec. 26, LaBarge, Wooten Interests.
Sec. 22, LaBarge, Portland Oil Co.
8-26-113 SE Reece Oil Co.
27-27-113 NW Reece Oil Co.
9-26-113 Uintah-Transcon. Oil Co.
**Shut Down**
32-19-110 NE John Johnson.
22-28 112 NE Margaret Kay.
24-15-118 NW Mrs. D. Connell 3.
32-19-110 Granger Oil & Gas.
22-26-113 NW Big Piney Oil Co.
3-26-113 SW Fawcett & McPerson.
4-26-113 SE Uintah Oil Co.
3-26-113 Wyoming Reserve Oil Co.
35-27-113 SE Asso. Prod. Synd. 2.
27-27-113 NWBeneficial Oil Co. 5.
32-19-116 Conger et al.
Rigs 2; wells drilling 31; total 33

**BAXTER BASIN**
**Shut Down**
26-17-104 Associated Oil Co. 3.
23-17-104 SE Associated Oil Co.
24-17-104 SE Montical Oil Co.
8-16-104 SE Montical Oil Co.
27-17-104 SE Montical Oil Co.
30-18-104 Midwest Refg. Co. 6-AX.
26-17-104 SE Associated Oil Co.
Rigs 0; wells drilling 7; total 7.

**MISCELLANEOUS**
**Rigs**
Baggs Dome, M. M. Armstrong.
Agate Basin, Hollingsworth et al.
**Wells Drilling**
12-26-27 Platte River Drilling Co.
8-44-60 Briggs & Sartain.
5-51-67 C. M. Carroll et al.
28-31-68 John Ackard et al.
24-26-82 NW Foreman et al.
28-42-78 Seattle Syndicate.
Guernsey Dist., Illinois Syndicate.
28-42-79 Montana Giant Oil Co.
Buffalo Dist. Kinney Coastal Oil Co.
15-33-68 SW Schuyler et al.
1-32-68 A. E. Maughft et al.
32-62-67 SW Western Consolidated.
4-32-82 SE Carl Sackett et al.
23-45-62 SE Olson-Spaulding Co.
7-48-82 Fairway Oil Co.
**Shut Down**
24-49-64 Osage Trust Co.
31-50-69 Roset Oil Co.
20-29-68 Nebraska Oil Co.
18-39-78 Glendo Oil & Gas Co.
6-28-82 Jay Em, Foreman et al.
1-44-61 SW Osage Trust Co. 2.
9-41-80 Newcomb et al.
31-37-67 NW Atlas Oil Co.
11-45-65 Reserve Oil & Gas.
28-47-65 NE Gose Syndicate.
35-48-64 Lilley, Pump Creek Oil & Gas.
17-46-82 R. C. Tarrant et al.
20-33-70 Horseshoe Syndicate.
13-26-66 A. E. Jacobs.
1-44-61 NE Gose Syndicate.
2-57-66 Fletcher et al.
1-32-65 Manville Oil & Gas.
Rigs 2; wells drilling 32; total 35.

**MONTANA**
**CAT CREEK**
**Rigs**
12-15-28 NE Schaffer Oil Co.
**Wells Drilling**
11-15-29 Cooke-Coolidge-Ida 1.
12-15-30 NE Standard of Calif. 7.
21-15-30 Masser, Kessling Oil Co.
23-14-28 Winnet Pacific Oil Co.
1-15-29 Custer Oil Co.
9-15-29 NE Frantz Oil Corp.
13-15-29 Green, Frantz Oil Corp. 10.
14-15-29 Clayton, Frantz Oil Corp. 15.
36-16-28 NE Hardrock Oil Co.
5-15-29 Midwest Refg. Co.
7-15-29 NW Hogan et al 2.
11-15-29 Fifty-Six Pet. Co. 14.
**Shut Down**
10-15-29 Fifty-Six Pet. Co.
15-15-30 Swartz et al.
28-16-28 Peerless Oil Co.
Rigs 1; wells drilling 15; total 16.

**KEVIN SUNBURST**
**Rigs**
11-25-2 Stockmans Natl. Bank.
29-35-1 Benton, Arronow Oil Co.
4-32-4 Swears, Beardsley 1.
20-31-2 McBride, Canadian American Oil.
25-36-2 Troy Island Oil Co.
17-31-1 Potlatch Oil Co. 2.
30-35-1 Stannard, Wallace Oil Co. 2.
20-35-1 Steel, Big West Oil Co.
30-35-1 Maughan, Ohio Oil Co. 10.
19-36-2 Bruins, Ohio Oil Co. 3.
**Wells Drilling**
30-35-1 Maughan, Ohio Oil Co. 9.
14-35-2 Engemoon, Ohio Oil Co. 2.
32-35-1 Putnam-Kewanee 7.
20-35-1 Sollid, Flood-Watson 1.
28-35-1 Collins, Levnick 1.
31-35-1 Allen, Big West Synd.
30-35-1 Stannard, Rose Oil Co. 3.
1-34-2 Faunce, Sunburst Oil & Ref.
21-36-3 Herman, Kevin Oil & Gas 3.
14-35-2 Reeg, Sunburst Oil & Gas 3.
31-35-1 Kaiser, Corey Oil Co. 3.
11-34-1 Peterson, Sturdevant Oil Co. 1.
22-35-2 Helmericks, Continental Oil Co. 8.
11-34-3 Freemke, D. A. S. Oils 1.
33-35-2 McCormick, Diamond Oil Co. 5.
24-35-2 Bryne, Ellis Oil Co. 3.
7-34-1 Wilcox, Keylon et al.
17-34-2 DeGroat, Wenoah Synd. 2.
5-35-2 F. M. Bell.
9-32-2 Suhr, Sunburst Prod. Co.
33-34-2 NE Frazier Oil Co.
8-34-2 Pittsburgh Montana Oil.
32-36-2 Roundsley, Sunburst Oil & Gas.
24-32-1 Shelby Syndicate.
28-37-2 McAlpine, Sparton Oil Co.
20-35-2 Malter, Sunburst Prod. Co.
18-34-1 Skinner, Creel et al.
32-35-1 Putnam, Keystone Oil Co.
7-34-1 Harte, Russel et al.
30-35-1 State, Tri-State Oil Co. 3.
9-34-2 O'Haire et al.
35-35-2 Sunburst Oil & Gas.
22-35-2 SW Lorenson et al.
2-34-2 DeGroat, Ethridge Basin O. & G.
29-35-1 Maughan, Sweeney Oil Co. 4.
18-30-2 Ketley, Great Northern Prod.
17-35-2 Frazer, Rice Oil Co.
30-35-1 Stannard, Tri-State Oil 5.
26-35-2 Abell, California Co. 5.
8-34-2 Hurley, McDonald et al.
24-34-1 DeMare, Postlewaite et al.
1-34-2 Steel, Bruce Radigan 2.
2-33-4 Medillia Drilling Co.
1-34-2 Faunce, McIntire-Beckett.
34-35-2 Lashbaugh, Ferdig Oil Co. 11.
13-34-2 Morton, Liberty Oil Co.
**Shut Down**
28-35-1 Shelby-Federal-Miller.
23-33-1 Webb, Shelby Oil & Gas.
12-34-1 Peterson, Lucky Forty Oil Co.
13-32-2 Campbell, Campbell Syndicate.
16-34-2 NW Rainbow Oil Co.
21-34-1 Adams, Potlatch Oil Co.
Rigs 10; wells drilling 52; total 62.

**MISCELLANEOUS**
**Rigs**
24-14-15 Fullerton Oil & Gas.
12-16-32 Hibbard Oil Co.
4-28-30 Mid-Northern Oil.
34-23- 2 Rainbow Syndicate.
**Wells Drilling**
28- 8-45 Montana Belle Oil & Gas.
25-17-24 California Co.
21- 1-21 Big Lake, Record Pet. Co. 3.
Big Lake, Delmar Oil (Barnsdale Foster).
21-37 5 Utah-Western Pet. Co.
21- 7 21 SW Atlantic Pet. Co.
3-12-25 SW Minnesota Flatwillow.
33-19- 7 SW Hager Stephenson Oil & Gas.
13-8- 2 Coal Ridge, Montana Oil & Gas.
5- 3-16 Montana Portland Oil.
33-16-28 H. H. Swartz Jr.
9-31-19 California Co.
14-14-25 Flatwillow, A. M. Z. Synd.
32-25-30 Butler Oil & Gas.
24-30-12 Continental Prod.
17- 2-19 Snyder, Mid Northern Oil.
4-27-20 California Co.
20-24- 1 C. A. McDonald et al.
16-15-25 SW Great Northern Mutual.
3-27- 8 Robinson et al.
Benton Lake, Browning et al.
McDonald Creek, Wilson-Fisher 3.
32-36- 2 Weil Syndicate.
7- 8-57 NE California Montana.
17- 2-18 NE Gibson Land Co.
29-38-28 Glasgow Explor. Co.
5-15-29 Deaveraux, Deaveraux Oil Co.
25-12- 1 Ainsworth, Neudigate Est. Inc.
18-30- 3 Kelley, G. N. Producers.
8-21-19 Bowes, California Co.
25-15-25 SW Winnet Oil Co.
26- 1-21 Moddrell, Leonard Oil Co.
4- 2-25 SW McMimmemin et al.
18-22- 3 Elk Horn Oil Co.
24-10-39 Johns et al.
13- 6-17 Makay, Ohio Oil Co.
5-35- 1 NE F. G. Ostland.
2-26- 2 Jones, W. M. Edwards.
18- 3-33 SW Securities Prod. Co.
5- 2-23 NE American Indian Oil Co.
35-32-32 SW Bowdoin Oil & Gas.
7-27- 7 NW Circle Oil Co.
26-10-29 Stellar Oil & Gas.
32-30- 2 Denzer, Drake Oil Co.
18- 6-23 Mennemier & Newman.
6-13-24 Fulton Oil Co.
30-15-26 Winnet Shallow Oil Synd.
7-21- 1 Tri-City Oil Co.
Devils Basin, Alberta Block Coal Co.
25- 2-27 Gladys Belle Oil.
Devils Basin, Montana Central Oil.
12-11-13 Kalispell Synd.
6- 5-25 Grey Eagle Oil Co.
2-28- 2 NE Dry Fork Oil Co.
8- 4-22 NE Hoosier Oil Co.
24- 5- 8 Potter Basin Oil & Gas.
10-18- 2 NE Moscow-Idaho Oil.
23-30- 2 NW West Virginia Oil Co.
27-36-22 SW Mountain Chief Oil 2.
24-14-25 NW Henry Seibert.
14-31- 1 NW Dunkirk Oil Co.
22- 4-81 SW Olympus Oil Co.
32- 3-16 SW Consolidated Oil & Gas.
34-22- 1 G. N. Mutual.
6- 2-24 SE American Indian Oil Co.
23-14-28 SE Winnet Pacific Oil.
9-10-38 SE Steilar Oil & Gas.
Rigs 4; wells drilling 67; total 71.

**COLORADO**
**Rigs**
24-2-103 Tidewater Asso. Oils.
10- 3-44 Yuma Valley Oil Co.
1- 8-68 Morrel, Petroleum Prod. Co.
17- 8-68 Ft. Collins Chief Oil.
29-10-68 American Pet. Co.
12-38-79 Green Mountain Pet. Co.
31- 9-68 Midway Oil and Gas.
27- 2-70 Rainbow Oil Dev. Co.
26- 9-69 NW Farrel et al.
8- 9-68 NE Union Junior Oil Co.
36-10 69 State, Seneca Oil Co.
13- 6-68 SE Panco Exploration Co.
10-10-61 SE Daugherty et al.
13- 1-46 NW Yuma Oil Co.
**Wells Drilling**
19- 8-68 Larson, Union Oil of Calif.
30- 8-68 Whitaker-Blunck, Union Oil Co. 2.
16-10-69 Buckeye, A. A. Rollestone Co.
28- 3-65 Watkins, Miller Oil Co.
28-28-52 South East Colorado Oil Co.
18- 6-86 Dennis, Texas Prod. Co.
33- 1-70 Dennis, Repollo Oil Co.
8- 6-86 Belle Dennis, Texas Prod. Co.
24- 6-61 Patterson, Platte Valley Pet. Co.
1- 2-68 Orrison, Municipal Oil Co.
33- 8-69 NE Hobart Pet. Co.
21-20-69 Majada Oil & Gas. 2.
8-20-69 Florence, Rosie Oil Co.
8-20-69 Wallace Oil & Mining Co.
23-33-12 Erdman Drilling & Prod. Co.
13-33-12 NW W. H. Hall et al.
34-32-56 No Jack Oil Co.
8- 9-69 Warren, Union Oil of Colo.
6- 7-68 Brown, Fifty Four Oil Co.
13-33-13 Hall-Murray Co.
5-8-103 Gypsy Oil Co.
34- 5-98 Morgan, Union of Calif.
4- 6-68 Webster, Douglass Oil Co.
10-24-69 Panuco Exploration Co.
17- 5-64 Hog Ranch, Roland Oil Co.
5- 6-68 Majestic Oil Co.
4-32-67 Tulsa Oil Leasing Co.
34- 8-68 Ruff, Victory Oil Co.
9-12-68 Panuco Exploration Co.
1- 9-68 NW Great Northern Oil Co.
25- 1-69 Everhard, Boulder Oil Corp.
30-27-45 NW Lamar Oil Co.
1- 5-69 Deegan, A. A. Rollestone Oil Co.
6-10-69 NE San Carlos Oil Co.
21- 3-69 Clark, Mariand Oil Co.
4- 6-68 Webster, Associated Oil Co.
6-8-102 Linguist, Midwest Refg. Co.
36-7-103 Smith, Midwest Refg. Co.
14- 1-66 Smith, Retter Oil Co.
34-17-70 Mutual Oil Dev. Co.
12- 9-79 McCallam, Continental Oil Co.
4-20-69 Templeton, Continental Oil Co. 572.
16-21-65 Columbus Heights Oil Co.
9-17-67 John Jr., Red Creek Oil Co.
36-10-69 State, Union of Calif.
Fremont County, Parkdale Oil & Gas.
17-17-64 Caristy Oil Co.
31-10-69 Buckeye, Union Oil Co. 4.
32-10-68 Hess, Union Oil Co.
7- 9-68 Gault-Piatt, Union Oil Co. 2.
7- 9-68 North Poudre, Union Oil Co.
18- 9-68 Elder, Union Oil Co.
7- 9-68 Stutchel Lake, Union Oil Co.
28-28-52 SE Colorado Oil Co.
15- 4-91 Pohlman, Texas Prod. Co.
27-20-69 Good Luck Oil Co.
1- 8-69 Warrel, Cons. Oil Fields.
10- 4-91 Knowlton, Texas Prod. Co. 7.
26- 7-92 NE Boyles Oil Co.
15-20-69 Continental Oil Co. 571.
31-18-51 Mineral Exploration Co.
16-20-69 E. R. Goode et al 2.
17- 9-68 Elder, Farrells Associates.
34- 8-69 Ruff, Equitable Oil Co.
15-21-65 Union Oil of Colo.
30-2-102 Emerald, Texas Prod. Co.
Florence, Florence Pet. Co.
9-12-62 Ullum, Roland Oil Co.
19-16-48 Schlotz, California Co.
3-32-12 Leidecker Pet. Corp.
30-27-45 Johnson, Chesapeake Oil Co.
8-8-102 Smith, Sun Oil Co.
6-23- 2 Hutchinson, E. J. Miley 1.
4-34- 2 Frisco, Mt. States Oil Co.
11- 4- 8 H. H. Temple et al.
6-23-62 State, Bent County Oil & Gas.
11- 1-44 Yuma, Hessick Drilling Co.
17-34- 2 C. W. Kirkwood.
**Shut Down**
32-20-63 Baxter, Salida Oil & Refg.
36- 9-69 NW Atlantic Pet. Co.
31-9 -26 NW White River Dev. Co.
22-21-100 Wm. Morris et al.
30-2-102 SE Midwest Refg. Co.
13- 8-68 Hoff, Centennial & Sunset.
28- 5-91 Freeman, Texas Prod. Co.
33- 5-91 Hamilton, Texas Prod. Co.
25-24-61 SW Utah Southern Oil Co.
28-28-32 Associated Oil of Colo.
28-27-70 Genrung, Sand Hills Oil Co.
18- 6-86 Texas Prod. Co. 2.
32-31-61 Colorado Oil Co.
23- 6-69 Ruekvetter, Wellington Oil Co.
19- 5-69 Alps, Gateway Oil Co.
23- 9-69 Waverly, Consolidated Oil Fields.
32-10-68 SE Imperial Oil Co.
25- 8-68 NE American Pet. Corp.
24- 9-69 Hanna, Wellington Oil Co.
6- 7-68 NE Bonner Oil Co.
17-17-64 NW Peerless Oil Corp.
30- 4-68 NW Panuco Exploration.
4-45-16 NW Gilmore Oil Co.
24-2-103 Rigby, Midwest Refg. Co.
Rigs 14; wells drilling 102; total 116.

**UTAH**
**Rigs**
18-23-21 Metropole Oil Co.
4-22-19 Crescent Dome Pet.
8-28-22 Utah Oil Dev. Co.
**Wells Drilling**
19- 9- 8 E. J. Raddatz.
27-41-19 Utah Southern Oil Co.
35-21-16 Culbertson, Marland Oil Co.
36-26-20 Shaffer, Midwest Refg. Co. 2.
19-22-21 Utah Oil & Refg. Co.
35-40-90 Utah Oil & Refg. Co. 2.
31-43-10 Utah Oil & Refg. 3.
Roselle Dist., Lakeside Oil Co.
16- 2- 5 State, Western Empire Oil Co.
32-42-17 Monroe Oil Co.
Diamond Fork, Gustaven Oil Co.
7-21-19 SW Stanburg Pet. Co.
23- 3-24 Clay Basin, Prod. & Refs. 2.
12-19-13 Utah Oil & Refg.
17-27-20 Shaffer, Midwest Refg. Co.
23-14-92 Mt. States Pet. Co.
27-21-19 Western States Dev. Co.
4-22-19 Crescent Eagle Oil Co.
22-25-21 Embar Oil Co.
4-19-25 Chas. Orchard et al.
**Shut Down**
2-21-20 L. L. Travis.
21-22-22 Hope Syndicate.
6-14-13 San Juan Dev. Co.
23-42-17 Monumental Oil Co.
12-19-13 Ute Pet. & Utah Southern.
13- 4- 6 Castle Dale Oil Co.
27-16- 4 Producers Oil Co.
Lakeside Dome, W. R. Holmes.
Diamond Fork, Franko Utah Oil Co.
34-25-21 NW Big Six Oil Co.
25-13-13 Utah Central Oil Co.
Rigs 3; wells drilling 31; total 34.

**NEW MEXICO**
**Rigs**
19-36-34 SW Sinclair & Fenton.
30-20-10 Benedenum & Trees.
32- 4- 6 McDonald, Ohio Oil Co.
15-21-33 NW Covert et al.
19-16-34 SW Crescent Eagle Oil.
17-31 -8 Huntington Park Oil.
36-12- W. M. Graham.
18-18-28 SW Danciger-Beeson 2.
3-18-28 SW Levers & Carper 3.
10- 4-28 NW Oliver Well.
8-18-28 NE Texas Prod. Co. 5.
5-18-28 State, Lever et al.
36- 1-21 Ingram, Navajo Oil Co.
27-19-28 Mescatero Pet. Co.
**Wells Drilling**
21-18-28 SE Flynn, Kelch & Yates 45.
21-18-28 SE Flynn, Welch & Yates 39.
5-17-28 SE New Mexico Oil Co.
17-17-28 SW Texas Prod. Co. 1.
8-26-18 Navajo, Continental Oil Co.
12-30-10 SE Miley Oil Co.
32-33-12 NW Miley Oil Co.
18- 7-21 Ventura Pet. Co.
19-27-17 Table Mesa, Continental Oil Co. 7.
5-14-19 Mariand Oil Co.
29-17-28 Texas Prod. Co.
17-17-28 Bobbs, Texas Prod. Co.
5-17-32 Mitchell, Maljamar O. & G.
17-17-32 Beardsley, Maljamar O. & G.
3-18-27 Mann, Compton 2.
16-18-28 Compton, Hasenfuss, Lewellyn.
13-18-28 Hasenfuss-Donley.
15-18-28 Wians, Harris & Rehn.
5- 8-23 Meleaven, Peerless Oil Corp.
30-20-10 Pittsburgh Oil Dev. Co.
15-11-26 Purcell, Rodgers et al.
9-13-34 Prairie Oil & Gas.
29- 1-21 Steel-Rhinesmith.
17-18-28 SW Cummins 3.
4-18-28 SE Pueblo Oil Co. 4.
14-15-17 NW Arkansas Fuel Co.
20-29-11 NE West Coast Gaso. Co.
4-21-27 Olson, M. M. Miller.
15-29-11 Bloomfield Oil & Gas. Co. 6.
15-23-24 California Co.
2-12-29 Bell, Marland Oil Co.
24- 8-23 SE Lewis et al.
30- 4- 9 NE Red Feather Oil Co.
16-29-11 SE C. S. Ringle.
34-29-11 C. S. Ringle.
4-21-30 SW Van Cleve & Kronen 2 and 3.
9-13-24 McKee, Olean Oil Co.
24-10-27 NW R. C. Christman.
23-18-11 Pan-Mex. Dumas 1.
24-31-15 W. R. Childers.
8- 2-14 Simmons et al.
10- 3-17 Transport Oil Co.
17-18-28 NW W. G. Hurst.
9-10-28 SW Danciger Bros.
23-17-20 SW Wooley-Jones.
1-17- 9 Welch et al.
3-21- 2 Williams et al.
15-29-11 Butler-Stonacher Synd.

7-13-10 NW Wood et al.
19-21-19 NE F. A. Black Drilling Co.
25-17-26 Patterson & Stumpi.
15-15-29 Southern Exploration Co.
4-18-28 New State, Ohio Oil Co. 9.
4-18-28 SE Fite No. 1.
8-16-27 Campbell, Colo. Gas & Fuel Co.
25-11-26 SW N. Jones.
7-18- 1 La Ventana Oil Co.
22-19-27 NW Valley Oil Corp.
8-16-27 SE Colorado Drilling Co.
8-31-21 NE Owens-Albuquerque.
8- 6- 1 NW DeChaves Pet. Co.
2-29-19 Continental Oil Co. 17.
18-18-28 SE Danciger-Beeson 1.
9-18-28 NE Sidler Drilling Co.
1- 6-27 SW Steel-Rheinsmith.
9- 6-34 Grady Oil Co.
11- 5-35 Frio Oil Co.
4- 2-20 Hinkle et al.
14-13-14 State Cons. Oil Co.
9-29-11 Bruce Bragel.
24-30-13 SW Portage Oil & Gas Synd.
5-18-27 Brainard, Swartz, Compton, Eaton.
31-19-28 Pruitt, Ohio Oil Co. 1.
4-18-28 SW Frontier Oil Co. 10.
5-19-28 NW Fletcher et al.
33-18-28 NW Snowden-McSweeny 4.
12-18-27 Pitcher Oil & Gas 2.
19-18-29 Bujac-Wade-Murphy.
1- 2-32 NE Painter et al.
29- 9-21 Steel-Rhinesmith.
34-23-21 H. D. Adders.
10-28-25 Moore, Red Feather Oil Co.
34-29-11 Garland, Congress Oil Co.
19-30-11 Clark, Mexhoma Oil Co.
23-33-12 Pulliam, Erdman et al.
13-33-12 Murray, W. H. Hall et al.
30-30-15 Bowman, Williams et al.
12-30-12 Lannier, Anamiss Oil Co.
33-17-32 Pearsall, Maljamar Oil & Gas.
5-17-32 Mitchell, Maljamar Oil & Gas.
21-17-32 Maljamar Oil & Gas.

**Shut Down**

34-14-44 SW Meadow Oil Co.
3-13-15 SW Santa Fe Oil Co.
36-11-27 SW Buffalo-Roswell.
31- 3-15 NW Wyo. Colo. Oil Co.
22-18-27 State, Oscar Howard.
24-29-11 Hubbell & Hall.
21-30-11 Home Gas Co.
2-19-26 Peckenbaugh, Eureka Oil Co.
1- 3-32 NE Gurley Oil Co.
24-21-11 SE Angelus Mining Asso.
21-14-15 SE Blackstone Champion.
30-13-10 SW Wood et al.
6-29- 9 Detroit Oil Corp.
10-29-24 NW Eureka Oil Co.
19-20-30 NE W. C. Wells & Sons.
29-29-11 Montesuma Syndicate.
12-29-13 SW Ship Rock Oil Co.
23-34-82 Bradford Wyoming.
9-30- 9 Rainbow Oil Co.
36-20-30 Yates, Keyes et al.
11-16-27 SE Blue Bird Oil Co.
3-22-26 NE Blue Bird Oil Co.
16-13- 9 Melstead No. 2.
25-13-31 SE Standard Pet. Co.
11-20-29 Rawson, William Dooley.
31-14- 9 SE Union United Oil Co.
26-18-18 New Mexico Oil Co. 2.
25- 7- 2 Swisher & Wallace.
31-19-28 Johnson, Ohio Oil Co.
30-28-11 New Mexico-Milwaukee Synd.
23-18-15 E. M. Treat & Co.
27-18-28 SE Quillen & Dunnett.
15-12-23 NW Zeppenfield Co.
16- 1- 7 NE Fort Sumner Oil Co.
32- 7-10 SE California Exploration Co.
33-11-35 Tilton & Croft.
23-16-29 Young, Ohio Oil Co. 1.
8-16-27 SE Irvine et al.
5-22-19 NE F. A. Black Drilling Co. 2.

Rigs 14; wells drilling 130; total 144.

### WYOMING

**Wells Completed**

23-40-79 SE Wyoming Asso. 33-L .... 252
23-40-79 SW Wyoming Asso. 19-A .... 40
14-40-79 SE Wyoming Asso. 22-A .... 60
34-40-79 NE Midwest Oil Co. 13-L .... 100
26-40-79 SW Midwest Oil Co. 6-L .... 87
36-40-79 SE Midwest Oil Co. 4 ..... 100
13-40-79 SW Midwest & Wyo. Asso. 21-A ..... 50
13-40-79 SW Midwest & Wyo. Asso. 15-A ..... 80
12-40-79 SW Midwest Oil & Wyo. Asso. 16-A ..... 40
29-40-78 NW Texas Prod. Co. 17-A .... 30
28-40-79 SW Jupiter Oil Co. 35-S .... 30
34-40-79 SW Continental Prod. Co. 36-A ..... dry
7-39-78 SE Continental Prod Co. 36-A dry
14-40-79 SW Wyoming Asso. 21 ..... 35
14-40-79 SW Wyoming Asso. 15-A .... 35
14-40-79 SE Wyoming Asso. 22 ..... 40
25-40-79 NE Midwest & Wyo. Asso. 3-A 20
13-40-79 SE Mt. and Gulf 4-A ..... 25
35-40-79 NE Midwest Oil Co. 33-L ....2350
35-40-79 NW Wyoming Asso. 1-A. .... 20
26-40-79 SE Wyoming Asso. 19-A..... 50
14-40-79 SW Wyoming Asso. 16-A ..... 60
11-40-79 SE Midwest Oil Co. 22-A..... 55
36-40-79 NW Midwest & Wyo. Asso. 11.. 68
13-40-79 NW Midwest & Wyo. Asso. 4-A 20
25-40-79 SW Midwest & Wyo. Asso. 8-A 30
13-40-79 NE Mt. and Gulf 29-A ..... 25
13-40-79 SE Mt. and Gulf 29-A..... 35
13-40-79 NE Mt. and Gulf 8-A..... 30
13-40-79 NE Mt. and Gulf 15-A ..... 20
14-40-79 SE Wyoming Asso. 16 ..... 28
35-40-79 NE Midwest & Wyo. Asso. 22-A 40
12-40-79 SW Midwest & Wyo. Asso. 33-A 32
35-40-79 NW Midwest & Wyo. Asso. 6-A 20
11-40-79 SE Midwest Oil Co. 18-A..... 25
35-40-79 SW Midwest Oil Co. 33-A..... 30
26-40-79 NE Wyoming Oil Fields 3-A... 20
35-40-79 NW Wyoming Oil Fields 18-L 95
19-40-78 Texas Prod. Co. 25-AXS ..... 20
32-40-78 Texas Prod. Co. 29-A ..... 40
19-40-78 Utah Oil & Refg. 12-A ..... 100
25-26-88 SE Hughes Royalty Co. ..... 30
17-26-90 Prairie Oil & Gas Co. 34-A.... 200
14-66-77 SE Rex Dome Oil Co. ..... dry
9-46-63 John O'Brien ..... 10
36-46-63 John O'Brien ..... dry
50-46-63 Fletcher Bros. ..... dry
6-46-63 Osage Trust ..... 8
15-34-87 Continental Oil Co. ..... dry
9-26-113 Transcontinental Oil Co. .... dry

Wells completed ..... 59
Production ..... 4490
Dry ..... 7

### MONTANA

**Wells Completed**

4-32- 2 Corey, Johnson Signal Hill 8.. 40
27-35- 2 Lashbaugh, Swift Current Oil Co. ..... 10
25-35- 2 McKee, California Co. 6 ..... 15
31-35- 1 Corey-Keiser Co. 3 ..... dry
30-35- 1 Emmons, Dakota Montana 9 .. 20
32-35- 1 Caine, Fifty-Six Pet. Co. 12 ... 125
4-34- 2 Moore, Queen City Oil Co. 20.. 50
31-35- 1 Byrne, Fulton Oil Co. 13 ..... 800
33-35- 2 Halloran, Regina Kevin 4 ..... 20
30-35- 1 Stannard, Rice Oil Co. 7 ..... 150
31-35- 1 Byrne, Fulton Oil Co. 12 .....3000
32-35- 1 Putnam, Tecumseh Oil Co. 2 .. 40
36-35- 2 Hardrock Oil Co. ..... 13
7-35- 1 Dakota Montana ..... 50
4-34- 2 Corey-Johnson 8 ..... 120
33-35- 2 McCormick-Diamond 6 ..... gas
35-35- 2 Abell, Ferdig Oil Co. 6 ..... gas
36-35- 2 State, Homestake Oil Co. 8 ... 600
1-34- 2 Lewis-Wismont ..... gas
30-35- 1 Stannard, Rice Oil Co. 8 ..... 200
36-35- 2 State, Homestake Oil Co. 9 ... 50
36- 1-12 State, Springdale Oil Synd. ... dry
3-35- 2 Davey, Ohio Oil Co. 10 ..... 40
19-25- 1 SW Kalispell Kevin Synd. 1... 25

Wells completed ..... 24
Production .....5368
Dry ..... 2
Gas ..... 3
Gas production .....6,500,000

### COLORADO

**Wells Completed**

10- 4-91 Knowlton, Texas Prod. Co. 6..3000
7- 9-68 Gault-Piatt, Union Oil Co. 1... 800
31-10-68 Buckeye, Union Oil Co. 3 ... 50
22- 4-92 Parkinson, Midwest Refg. Co. 3 45
30-10-68 LeRoy, Wyo.-Ill. Pet. Co. .... 40
18-20-46 Ne-No-Shee Oil Co. ..... dry
10- 4-91 Wick, Texas Prod. Co. 2 ..... 400
31-10-68 Messerschmidt, Union Oil Co.. 100
16-20-69 E. R. Goode et al ..... 15
28-20-69 Travis Raddatz Synd. ..... 30

Wells completed ..... 10
Production .....4480
Dry ..... 1

### NEW MEXICO

**Wells Completed**

4-18-28 New State, Ohio Oil Co. 10 ... 20
18-18-29 Edgerton, Ohio Oil Co. 1 ..... dry
29-18-28 SE Flynn, Welch & Yates 40.. 50
21-18-28 NE Dome Oil Co. 5 ..... 75
18-18-28 State, Kersey & Conrad 3 ..... 40
4-19-28 NW Mesa Oil Co. ..... 20
20-18-28 SW Shaw-Rathke ..... dry
21-18-28 SW Cheesman et al ..... dry
5-18-28 SE Texas Prod. Co. 4 ..... dry
3-18-28 State, Levers & Carpers 2..... 75
15-18-25 SE Eppenhauser et al ..... dry
31-24-27 SE Empire Gas & Fuel Co. ... dry
9-30-10 Lexi Oil Co. ..... dry
1-39-19 Navajo, Continental Oil 15 ... dry
10-27-17 Navajo, Continental Oil Co. 6 . dry
9-18-28 Flynn, Welch & Yates 44 .... 150
28-18-28 Flynn, Welch & Yates 43 ..... 100
4-18-28 McQuigg, Frontier Pet. Co. 10. 80
28-17-28 SW Navajo Oil Co. ..... 70
3-18-28 Flynn, Welch & Yates 41 ..... 150
3-18-28 Flynn, Welch & Yates 42 ..... 75
21-18-28 Dome Oil Co. 6 ..... dry
12-18-28 Pitcher Oil Co. 3 ..... 50

Wells completed ..... 23
Production ..... 955
Dry ..... 11

## EASTERN FIELDS

**Summary of Wells Completed**

| Fields— | Comp. | Prod. | Dry | Gas |
|---|---|---|---|---|
| Allegany | 26 | 50 | 0 | 0 |
| Bradford | 117 | 328 | 1 | 0 |
| Middle Field | 9 | 17 | 1 | 1 |
| Venango-Clarion | 33 | 53 | 1 | 3 |
| Butler-Armstrong | 15 | 25 | 5 | 3 |
| Southwest Pennsylvania | 19 | 24 | 3 | 11 |
| West Virginia | 95 | 488 | 16 | 47 |
| Southeast Ohio | 68 | 1,254 | 11 | 9 |
| Total May | 382 | 2,239 | 38 | 74 |
| Total April | 321 | 1,681 | 45 | 61 |
| Difference | 61 | 558 | 7 | 13 |

**Summary of Work Under Way**

| Field— | Rigs | Drg. | Ttl. |
|---|---|---|---|
| Allegany | 17 | 24 | 41 |
| Bradford | 30 | 118 | 148 |
| Middle Field | 1 | 7 | 8 |
| Venango-Clarion | 2 | 18 | 20 |
| Butler Armstrong | 13 | 14 | 27 |
| Southwest Pennsylvania | 19 | 30 | 49 |
| West Virginia | 60 | 123 | 183 |
| Southeast Ohio | 33 | 105 | 138 |
| Total May 31 | 175 | 439 | 614 |
| Total April 30 | 136 | 367 | 503 |
| Difference | 39 | 72 | 111 |

### WELLS COMPLETED

**ALLEGANY FIELD**

Haseltine, Atwood & Stebbins ..... 1
Fee, Empire Gas & Fuel, Ltd. ..... 1
Fee, Herrick & Wilbur ..... 3
Fee, Empire Gas & Fuel, Ltd. ..... 2
Fee, Phillips & Howard ..... wtr
Fee, Phillips & Howard ..... wtr
Fee, Empire Gas & Fuel, Ltd. ..... wtr
Fee, Empire Gas & Fuel, Ltd. ..... 2
Reid, agent, C. O. & W. O. Taylor ..... 4
Fee, Albert Oil ..... wtr
Fee, C. C. Brennan et al ..... 1
Fee, Cora Townsend ..... 1
Thompson, R. D. & H. B. Thompson ... 1
Fee, Hazelwood Oil ..... 5
Fee, L. C. Whitford et al ..... 2
McDermott, Wilbart Oil ..... 2
Coast & S. P. O., James McMillan ..... 5
Coast & S. P. O., M. J. Crowley et al... 2
Coast & S. P. O., F. C. Shaner et al ... 5
Fee, Gilligan & Dermitt ..... 5
Fee, Martin Bros. & Sawyer ..... 2
Fee, C. K. Wilson ..... 1
Cass, W. B. Davidson et al ..... 2
Perkins, W. H. Lobaugh, tr. ..... 2
Claire, N. A. Crandall ..... 2
Kinley Oil, W. J. Weller, tr. ..... wtr

Wells completed ..... 26
Production ..... 50
Water ..... 4

**BRADFORD FIELD**

Bing. 490, T. H. Kennedy No. 2, 138.... 1
Bing. 296, Andrus & McDowell 102 ..... 2
Bing. 431, J. A. Hooper 5 ..... 1
Bing. 391, George W. Bovaird 81 ..... 3
Bing. 500, Daily & Healy 28 ..... 2
Bing. 540, Park & Bovaird 35 ..... 1
Bing. 500, Daily & Healy 29 ..... 2
Bing. 540, Park & Bovaird 36 ..... 1
Vincent heirs, S. H. Elder et al 16 ..... 2
Rounds & Lawrence, South Penn Oil 53 30
Riddell estate, South Penn Oil 52 ..... 8
Cory & Shick, Guenter & Shick 4 ..... 2
Fee, M. C. Roat 39 ..... 2
Burns et al, Bliss Oil 30 ..... 2
Fee, M. C. Reidy 13 ..... 5
Fee, Stover & Hannon 9 ..... 4
Fee, Stover & Hannon 10 ..... 3
Fee, W. E. & W. W., Parmenter 30 ..... 2
Swift, Park estate et al 3 ..... 1
Fee, Hooker et al 8 ..... 3
Fee, Hazelwood Oil 7 ..... 3
Franchot, Harry & J. G. Shannon 12.... 2
Franchot, John Jackson, Jr., 19 ..... 2
Franchot, W. J. Oliver 19 ..... 5
Fee, T. H. Kennedy 17 ..... 1
Fee, T. B. Wilson 7 ..... 5
Franchot, Penn Brook Oil 18 ..... 1
Franchot, Maxwell Bros. 15 ..... 2
Fee, Dana & Dana 42 ..... 2
Franchot, Jeutter Bros. 10 ..... 2
Fee, L. G. Dana ..... 4
Fee, South Penn Oil ..... 3
Quintuple Oil, Mrs. E. Gildersleeve .... 1
Fee, South Penn Oil ..... 1
Fee, Mrs. Joseph T. Jones ..... 1
Kennedy No. 8, James L. Looker ..... 8
Bing., Hazelwood Oil 40 ..... 3
Bing., Hazelwood Oil 120 ..... 2
Bing., Hazelwood Oil 121 ..... 2
Fee, W. C. Kennedy Co. 52 ..... 2
Bing. 150, South Penn Oil 65 ..... 3
Fee, South Penn Oil 101 ..... 10
Bing. 159, South Penn Oil 12 ..... 3
Associated Prod., Holding Oil Corp. 21.. wtr
Kennedy & Clarke, Phoenix Oil 161 .... 18
Bing. 399, South Penn Oil ..... 2
Fee, A. Stover ..... 2
Fee, Linnie E. Barcroft ..... 2
Bing. 426, Scofield & White ..... 2
Fee, R. O. Landers et al ..... 2
Bing. 440, Hazelwood and South Penn Oil 14 ..... 5
Bing. 408, South Penn Oil 15 ..... 2
Bing. 482, South Penn Oil 24 ..... 2
Bing. 410, South Penn Oil 37 ..... 10
Bing. 370, Hazelwood Oil 69 ..... 5
Bing. 370, Hazelwood Oil 70 ..... 3
Bing. 439, South Penn Oil ..... wtr
Bing. 570, South Penn Oil 110 ..... 2
Borden, W. B. Miller ..... 2
Morse, J. Minnich estate ..... 2
Borden, T. P. Thompson ..... 2
Borden, T. P. Thompson ..... 2
Fee, J. H. Hifler ..... 2
Meldrum, Stephan & Tapp ..... 3
Borden, Pressure Oil ..... 2
Borden, Pressure Oil ..... 2
Howard, Pressure Oil ..... 5
White, South Penn Oil ..... 2
White, South Penn Oil ..... 2
White, South Penn Oil ..... 3
Borden, T. B. Wilson ..... 2
Kervin, Minnich Bros. ..... 2
Duke, M. B. Oil ..... 15
Duke, M. B. Oil ..... 5
Moot, Reclamation Oil ..... 2
Moot, Reclamation Oil ..... 2
Baldwin, C. B. Kervin ..... 3
Keating, Sloan & Zook ..... 3
Keating, Sloan & Zook ..... 3
Kapp, T. H. Kervin ..... 2
Russell, Potter & Devore ..... 3
Keating, J. B. Randall ..... 2
Burns, Burns Bros. ..... 2
Burns, A. E. Yahn ..... 2
Baldwin, Forest Oil ..... 2
Bingham, J. L. Yerdon ..... 1
Duke, M. B. Oil (10 wells) ..... wtr
Duke, M. L. Boyle, gdn. ..... 2
Lot 397, B. Hughes 6 ..... 5
Lot 3767, F. J. Moser 30 ..... 1
Hodge, South Penn Oil ..... 1
Sill, Hope Oil ..... 3
Sill, Hope Oil ..... 2
Pratt, Petroleum Reclamation ..... 3
Pratt, Petroleum Reclamation ..... 1
Pratt, Petroleum Reclamation ..... 3
Ekas, Lloyd & Piper ..... 2
Ekas, Lloyd & Piper ..... 2
Ekas, Lloyd & Piper ..... 2
Whipple, South Penn Oil ..... 2
Enterprise, South Penn Oil ..... 1
Taylor, M. E. Jones ..... 2
Bingham, W. S. Jones & Son ..... 1
Rew, F. D. Gallup et al ..... 2
Rew, F. D. Gallup et al ..... 1
Monroe, DeVore et al ..... 1
Bingham, Barry Bros. ..... 2
Taylor, South Penn Oil ..... 1
Germer, Linwood Oil ..... 1
Corwin, Simon Bros. ..... 2
Fee, W. J., Healy & Co. ..... 2
Fee, B. Devlin ..... 1
Bingham, South Penn Oil ..... 1
Bingham, H. B. Oil ..... 1
George, Nesselson Bros. ..... 1
Nolan, C. Nolan ..... dry

Wells completed ..... 117
Production ..... 328
Water ..... 12
Dry ..... 1

**MIDDLE FIELD**

T. & W., A. E. & W. C. Tompsett 74.... dry
Irvine, Hague & Co. 43 ..... 1
Osgood, Rembold et al 12 ..... 10
O'Hara, Pequignot & Barnard 11 ..... 2
O'Hara, Pequignot & Barnard 12 ..... 1
Irvine, D. Wade ..... 1
Beaty, Beaty estate ..... 1
Northrup, Knopf & Chapman ..... 1
Siggins, H. A. Siggins ..... gas

Wells completed ..... 9
Production ..... 17
Dry ..... 1
Gas ..... 1

**VENANGO-CLARION**

Shaffer & Myers, Shaffer & Myers 1.... 1
Shaffer & Myers, Shaffer & Myers 2.... 1
Blair, Reeves & Franklin Trust 46 .... 1
Craig Hoffman et al, J. F. Myers 13.... gas
Brown, P. H. Speerstra 11 ..... 2
Moses, S. P. McCalmont 13 ..... gas
Highfield, D. & E. E. Grimm 10 ..... 1
Strawbridge, H. G. Newson et al 6 .... 1
Graham, Exchange Bank of Franklin and Kennedy 37 ..... 1
Murphy, Taylor & Torrey, L. J. Kirkwood 22 ..... 1
Murphy, Taylor & Torrey, L. J. Kirkwood 23 ..... 3
Craig, Fritz, Craig et al 1 ..... 1
Sterrett, S. R. Smith 62 ..... 1
Sterrett, S. R. Smith 63 ..... 1
Nicklin, Franklin Trust 46 ..... 1
Hoffman, Hawkins & Monjar 31 ..... 1
Splane & Co., W. W. Splane 35 ..... 1
Clees, P. F. Clees 7 ..... 2
Hagerty, H. M. Hagerty 1 ..... 2
Anderson, Crawford & Gregory 15 ..... 5
McKee, McKee 8 ..... 6
Moorehead, Utzinger, Mong et al 7 .... 1
Clarion—
Beichner, Alum Rock Gas 10 ..... 2
Reichner, Alum Rock Gas 8 ..... 2
Kiser, C. E. Jeannerat 2 ..... 1
Kiser, Clark & McElhattan 2 ..... 1
Weaver, Weaver, Ray et al 5 ..... 1
Berlin, Frank, Etzel et al 1 ..... dry
Klingler, Klinger, Best et al ..... 2
Agnew, Agnew & Co. 1 ..... gas
Gribel, Samuel Gribel 2 ..... 5
Mercer—
Perrine, L. F. Perrine 14 ..... 3
Frazier, Erie Oil & Gas 3 ..... 2

Wells completed ..... 33
Production ..... 53
Dry ..... 1
Gas ..... 3

**BUTLER-ARMSTRONG**

Welsh, Lang & Co. 1 ..... dry
Criner heirs, Jos. Berry et al 1 ..... 1
Marshall heirs, Marshall, Thompson et al 2 ..... 15
Bachman, Keck & Co. 1 ..... dry
Cochrane, Saxonburg L. & H. 1 ..... dry
Shaner & Beilstein, Shaner & Co. 3 ..... 5
Bruner, Rabbitt & Hilderbrand 2 ..... 1
Pfeister, C. A. Horton et al 1 ..... 1
Hardy, Harmonite Oil 1 ..... dry
Logue, McGee & Co. 1 ..... dry
Bryan, T. S. Armstrong & Ruby 5 ..... 1
Myers, J. A. Elliott et al 15 ..... 1
Gibson, Fennell & McGarvey 1 ..... gas
Catholic church lot, W. Sammis et al 1. gas
McCrea, Shields & Co. 1 ..... gas

Wells completed ..... 15
Production ..... 25
Dry ..... 5
Gas ..... 3

**ALLEGANY FIELD**

**Rigs**

Haseltine, Atwood & Stebbins.
Fee, Empire Gas & Fuel, Ltd.
Fee, Phillips & Howard.
Fee, Phillips & Howard.
Fee, Albert Oil.
Fee, State Bank & Bolivar No. 28, No. 29.
Fee, F. L. Williams.
Birtcil, W. E. McMundry et al.
South Penn Oil A. B. Reeland et al.
Fee, Gilligan & McDermott.
Coast & South Penn Oil, James McMillan.
Fee, L. C. Whitford et al.
Coast & South Penn Oil, F. C. Shaner et al.
Fee, M. J. Crowley et al.
Perkins, W. H. Lobaugh, tr.
Cass, W. B. Davidson et al.
South Penn Oil et al, Empire Gas & Fuel.

**Wells Drilling**

Clark, L. E. Norton et al.
Fanton, E. M. Ketchner.
Taylor, W. A. Dusenbury et al.
Fee, Empire Gas & Fuel, Ltd.
Fee, C. M. Barnes et al.
Fee, McKean Natural Gas.
Herrick, E. C. Carthwaite et al.
Fee, Phillips & Howard.
Fee, Empire Gas & Fuel, Ltd.
Reid, agent, Cuba National Bank and Crandall.
Beatty & Horton, Sawyer & Jennings.
Burdick, B. A. Vossler et al.
Fee, Hazelwood Oil.
Coast & South Penn Oil, M. J. Crowley et al.
Fee, Gilligan & Dermitt.
Fee, C. W. Mead.
Fee, L. A. Wilson.
McDermott, Wilbart Oil.
McDevitt, E. J. Phillips.
Childs, Neal K. Wilson.
Kinley Oil, W. J. Weller et al.
Kinley Oil, W. J. Weller et al.
Fee, B. M. & W. M. Dunning.
Fee, Lavens estate et al.

Rigs, 17; wells drilling, 24; total 41.

**BRADFORD FIELD**

**Rigs**

Bing. 369, D. W. Daly 57.
Bing. 490, T. H. Kennedy No. 2, 139.
Rew, Bovaird & Hamlin 15.
Moore, Pure Penn Oil, Inc., 10.
Rounds & Lawrence, South Penn Oil 54.
Fee, Stover & Hannon 11.
Burns et al, Bliss Oil 31.
Burns et al, Krampf & McCandless 20.
Franchot, Simon & Cotton 13.
Fee, F. M. Johnston & Son 21.
South Penn Oil, John Jackson Jr. 14.
Fee, Dana & Dana 43.
Franchot, Melvin & Towne 8.
Franchot, Penn Brook Oil 19.
Fee, C. B. Kervin.
Fee, C. B. Kervin.
Fee, W. C. Kennedy Co. 53.
Bing., Hazelwood Oil 122.
Bing., Hazelwood Oil 41.
Grimm, J. W. Abrams 3.
Hallenbeck & Minster, W. M. Jackson et al 37.
Kennedy & Clarke, Phoenix Oil 162.
Bing. 410, South Penn Oil 38.
Bing. 370, Hazelwood Oil 72.
Bing. 582, Associated Producers 372.
Bing. 501, South Penn Oil 16.
Bing. 570, South Penn Oil 112.
Bing. 439, South Penn Oil.
Wright, E. H. & Retta Culbertson.
Bingham, H. E. Camp estate.

**Wells Drilling**

Bing. 321, Andrus & McDowell 70.
Vincent heirs, S. H. Elder et al 17.
Lawton, Gallup, Elder et al 26.
Rew, Bovaird & Hamlin 14.
Bing. 388, C. L. Wann et al 50.
Bing. 389, D. W. Daly 42.
Bing. 430, Lane No. 1 et al 70.
Bing. 391, George W. Bovaird 82.
Bing. 401, J. E. Ward 15.
Windsor, Wilson & Co. 12.
Riddell estate, South Penn Oil 53.
Fee, M. C. Roat 14.
Fee, M. C. Reidy 14.
Fee, W. E. & W. W. Parmenter 31.
Redfield et al, South Penn Oil 105.
Bing., B. P. Brown et al 8.
Fee, E. L. & F. J. Shippery 11.
Fee, T. H. Givan 12.
Fee, Hooker et al 7.
Fee, L. G. Dana 19.
Franchot, M. Johnston & Son 23.
Fee, Hazelwood Oil 48.
Franchot, W. J. Oliver 20.
Fee, T. H. Kennedy 18.
Fee, T. B. Wilson 9.
Franchot, Maxwell Bros. 16.
Fee, Mary J. Franks 5.
Fee, South Penn Oil.
Fee, South Penn Oil.
Fee, Mrs. Joseph T. Jones.
Fee, Kaber & Kaber 35.
Fee, South Penn Oil 34.
Bing. 150, South Penn Oil 66.
Bing. 151, South Penn Oil 29.
Fee, South Penn Oil 102.
Fee, Barry.
Brown, Hungiville et al.

Fee, Hilliard & Dodge 19.
Fee, Hunter et al 32.
Miller, Bouton & Snyder 6.
Fee, Roy E., Diament 14.
Fee, South Penn Oil 186.
Bing. 188, Harris Oil 31.
Fee, A. Stover.
Bing. 482, South Pen Oil 25.
Bing. 439, South Penn Oil 98.
Bing. 408, South Penn Oil 16.
Bing. 425, Grant & Mohan 10.
Bing. 370, Hazelwood Oil 71.
Bing. 581, Associated Producers 366.
Bing. 494, South Penn Oil 51, 52.
Bing. 533, South Penn Oil 82.
Hodge, South Penn Oil.
Sill, Hope Oil (2 wells).
Pratt, Petroleum Reclamation (3 wells).
Ekas, Lloyd & Piper (2 wells).
Whipple, South Penn Oil.
Enterprise, South Penn Oil.
Taylor, M. E. Jones.
Rew, F. D. Gallup et al (2 wells).
Monroe, DeVore et al.
Fee, W. J. Healey & Co.
Pratt, Korner Bros.
George, Nesselson Bros.
Hooker, Hyde & Becker.
Duke, Gridiron Oil.
Morse, J. Minnich estate.
Hanes, Coast & Storms.
Borden, T. P. Thompson.
Fee, J. H. Hiflier.
Meldrum, Wiborg & Co.
Howard, Pressure Oil.
White, South Penn Oil (3 wells).
Borden, T. B. Wilson.
Kervins, Minnich Bros.
Duke, M. B. Oil (15 wells).
Moot, Reclamation Co. (3 wells).
Baldwin, C. B. Kervin.
Keating, Sloan & Zook (2 wells).
Kapp, T. H. Kervin.
Russell, Potter & DeVore.
Keating, J. B. Randall.
Baldwin, Forest Oil (2 wells).
Shenfield, W. J. Fredericks.
D. C. & B., George & Kervin.
Wright, Wright & Johnson.
Emerson, G. L. Rhodes et al.
Bingham, J. L. Yerdon.
Elder, S. H. Elder & Co.
Lot 410, Wm. Harley 6.
Lot 426, Kane Oil 42.
Lot 268, Pennsylvania Gas 939.
Rigs, 30; wells drilling, 118; total, 148.

**MIDDLE FIELD**

**Rigs**

T. & W., A. E. & W. C. Tompsett 75.

**Wells Drilling**

Ulf, Fidelity Petroleum 1.
Irvine, Hague & Co. 44.
O'Hara, Pequignot & Barnard 13.
Osten, Rembold et al 4.
Irvine, D. Wade.
Smith, McCool Bros.
Lot 49, Lesser & Launer.
Rigs, 1; wells drilling, 7; total, 8.

**VENANGO-CLARION**

**Rigs**

Adams & Greene, R. S. Adams 13.
Walters, Phillips & Co. 1.

**Wells Drilling**

Knapp & Preston, Nickle & O'Brien 3.
Hasson, Ed Siederman.
McKee, C. L. Irwin 40.
Plumer, Eakin & Hutchison 44.
Kimes, Donaldson, McDowell et al 3.
Craig, Fritz, Craig et al 1.
Kern, C. B. Kern 15.
Hovis, Peoples Nat. Bank of Clintonville 11.
Shaup, Ginler & Co. 2.
Crawford & Gregory, Oil Well Supply 111.
Clarion—
Kapp, United Natural Gas 1.
Kapp, Alum Rock Gas 1.
Kapp, United Natural Gas 2.
O'Neill Bros., D. & H. O'Neill 7.
Knox, H. W. Wilson 1.
Kribbs, Wentling, Kribbs et al 3.
Wentling, H. E. Rugh 4.
Mercer—
Perrine, L. F. Perrine 15.
Rigs, 2; wells drilling, 18; total, 20.

**BUTLER-ARMSTRONG**

**Rigs**

Boggs heirs, R. C. & W. V. Binkerd.
Plumkard, J. S. Walker.
Morgan, I. N. Johns.
McKee, Mckee 9.
Anderson, Crawford & Gregory 16.
Stuart, Thomas Stuart 1.
Kriess heirs, J. E. Dufford & Co. 1.
Lefever & Bruner, Lefever & Co. 1.
Hoffman, Jewell & Co. 3.
Peters, L. D. Berry 1.
Dulity, Boyle, Little & Co. 1.
Kamerer, S. H. & O. G. Kamerer 1.
Fennell, Waltman & Hilderbrand Co. 1.

**Wells Drilling**

McKinney, G. F. Hovis et al 5.
Campbell, Mark W. Graham et al 8.
Jack, Sherwin & Burns 1.
Corso, Black & Parker.
Donaldson, W. Berry et al 1.
Rudert, Frederick & Co. 1.
Logan heirs, Battenfelder & Co. 1.
Dewey estate, Dewey Trust 2.
Pontius, Westerman, Pontius & Co. 6.
Peters, Charles Devlin 1.
Orphans Home School, Harmonite Oil 1.
Denny, Denny & Co. 1.
Kramer, Southern Oil 5.
McCague, Lang & Co. 1.
Rigs, 13; wells drilling, 14; total, 27.

## WEST VIRGINIA
## WELLS COMPLETED

**LEWIS COUNTY**

| | |
|---|---|
| Horner, R. C. Horner 1 | dry |
| Duncan, Duncan O. & G. 1 | gas |
| Rhodes, Petroleum Star Oil 1 | dry |
| Douglass, Bish & Co. 1 | gas |
| Fahey, Light & Heat Co. 1 | dry |

**HARRISON COUNTY**

| | |
|---|---|
| Martin, Hope C. & R. Co. 1 | gas |

**MARION COUNTY**

| | |
|---|---|
| Miller, Bell O. & G. 1 | gas |
| Freeland, Owens B. & M. Co. 1 | gas |
| Musgrove, Owens B. & M. Co. 1 | dry |
| Yost, Owens B. & M. Co. 1 | dry |

**MONONGALIA COUNTY**

| | |
|---|---|
| Fetty, Red Fox O. & G. 2 | 1 |
| Eddy, South Penn Oil Co. 14 | dry |

**WETZEL AND TYLER COUNTIES**

| | |
|---|---|
| Bates, Trainer Bros. & Ash 1 | gas |
| Balwanz, Hope C. & R. 1 | gas |
| Kimble, Gorrell & Co. 1 | gas |
| Johnston, Mfrs. L. & H. Co. 1 | dry |
| Himelrick, Hope Gas Co. 3 | gas |
| Hixenbaugh, Clovis & Co. 1 | gas |
| Morgan heirs, Albert Neeley 1 | dry |

**MARSHALL COUNTY**

| | |
|---|---|
| Maley-Newman, Burley & Co. 1 | gas |
| McCluskey heirs, Waynesburg Gas 1 | 40 |
| Boner, Decem Dev. Co. 1 | 15 |
| Yeater, Hope C. & R. Co. 1 | 5 |
| Fair, Hope C. & R. Co. 1 | 8 |

**DODDRIDGE COUNTY**

| | |
|---|---|
| Farris, R. S. Monroe 4 | 20 |
| Williams, Clifton O. & G. 3 | gas |
| Hefflin, C. H. Pigott 4 | 10 |
| Underwood, Norr Bell O. & G. 1 | 1 |
| Freeman, Clifton O. & G. 13 | 5 |

**RITCHIE COUNTY**

| | |
|---|---|
| Prunty, Cain Run O. & G. 3 | gas |
| Bee, Hope Gas Co. 2 | gas |
| Cox, Valley Oil Co. 1 | gas |
| Donnelly, E. E. Pope 1 | 1 |
| Dawson heirs, Southern Oil 13 | gas |
| W. Va. Tract, Wiles & Co. 21 | 3 |
| W. Va. Tract, Wyatt & Co. 10 | 3 |
| Mitchell, Rinehart & Co. 2 | 200 |
| Atkinson, So. P. O. Co. 5 | 95 |
| Marsh, Phila. Oil Co. 7 | 5 |
| Maze, American O. Co. 2 | 2 |
| Ridgeway, Continental O. & G. 2 | 6 |
| Phillips, Hope Gas Co. 1 | gas |

**GILMER COUNTY**

| | |
|---|---|
| Moore, Hope C. & R. Co. 1 | gas |
| Farmton, Hope C. & R. Co. 1 | gas |

**WOOD COUNTY**

| | |
|---|---|
| Henry, Reed, Athey & Co. 4 | dry |
| Wharton, So. P. O. Co. 3 | 4 |
| Grant, Congdon & Co. 10 | 25 |
| Lenhart, Four S Oil Co. 2 | 6 |
| Grant heirs, So. P. O. Co. 5 | 5 |

**PLEASANTS COUNTY**

| | |
|---|---|
| Racer, B. R. Crippen 3 | dry |
| Delong, Delong Farm Oil Co. 1 | dry |
| Robinson, Coleman & Co. 1 | 3 |
| Ambler, Bailey Gas Co. 6 | dry |

**ROANE COUNTY**

| | |
|---|---|
| Dix, Heckert & Co. 1 | gas |
| Roberts, Pell & Co., Federal O. & G. 31 | 5 |

**CALHOUN COUNTY**

| | |
|---|---|
| Gainer, Hope Gas Co. 1 | gas |
| Sourbourne, Hope Gas Co. 1 | gas |
| Fogle, Hope Gas Co. 1 | gas |

**MASON COUNTY**

| | |
|---|---|
| McMillan, Ohio F. O. Co. 1 | 5 |

**CLAY COUNTY**

| | |
|---|---|
| Stockley, So. P. O. Co. 21 | 15 |
| Kyle, So. P. O. Co 5 | 10 |
| Belcher, So. P. O. Co. 3 | 25 |
| Caston, Ohio F. O. Co. 9 | 20 |
| Brown & Co. Virginian G. & O. Co. 6 | 25 |
| Samples, Empire Pet. Co. 1 | gas |
| S. Samples, Chalmers O. & G. Co. 1 | gas |
| Boggs, U. F. G. Co. 1 | gas |

**LINCOLN COUNTY**

| | |
|---|---|
| Burton-Breedlove, Union Oil Co. 1 | gas |
| Dingis, U. F. G. Co. 1 | gas |
| Thompson, Sovereign Gas Co. 1 | gas |
| Jayne, Laurel Dev. Co. 0 | gas |
| Morris, A. F. Morris 4 | gas |
| Dingis, U. F. G. Co. 1 | gas |
| Breadlove, Union O. & G. Co. 1 | gas |
| Smith, Transylvania Pet. Co. 8 | gas |

**KANAWHA COUNTY**

| | |
|---|---|
| Halstead, U. F. G. Co. 3 | gas |
| Morrison, U. F. G. Co. 1 | gas |
| Hunt, U. F. G. Co. 1 | gas |
| Henderson, U. F. G. Co. 1 | gas |
| Jackson, U. F. G. Co. 1 | gas |
| Woods, U. F. G. Co. 1 | gas |
| Gibson, U. F. G. Co. 1 | dry |
| Pauley, U. F. G. Co. 1 | 4 |
| Morrison, U. F. G. Co. 1 | gas |

**PUTNAM COUNTY**

| | |
|---|---|
| Simms, Teays Prod Co. 3 | 6 |
| F. Simms, Kirtley & Kirtley 1 | gas |
| Pine, Kirtley & Kirtley 1 | gas |
| Smith, Charleston-Dunbar Gas Co. 2 | dry |

**CABELL COUNTY**

| | |
|---|---|
| Davidson, Aetna O. & G. Co. 3 | gas |
| Ball, Monickel Gas Co. 1 | gas |
| Morrison, Sweetland & Co. 1 | gas |
| Maddox, Transylvania Pet. Co. 1 | gas |

**MINGO COUNTY**

| | |
|---|---|
| Closterman Est., A. B. McGrew, Jr. 11 | dry |
| Logan Cannel C. Co., A. B. McGrew, Jr., 16 | 30 |

**LOGAN COUNTY**

| | |
|---|---|
| Cole-Crane, Zohnheimer & Gibbs 3 | dry |

Wells completed 95; production 488, dry 16, gas 47.

**LEWIS COUNTY**

**Rig**

Brown, Tomahawk O. & G. Co. 1.

**Wells Drilling**

Malley, Hope Gas Co. 1.
Linger, McCall & Co. 1.
Waugh, Phila. Gas. Co. 2.

**HARRISON COUNTY**

**Rigs**

Toothman, Owens B. & M. Co. 1.
Thorn, Owens B. & M. Co. 1.

**Wells Drilling**

Smith, Reserve Gas Co. 1.
Fettroe, S. I. Hornar 1.
Thornberry, Grasselli Chem. Co. 1.
Wilkinson, Grasselli Shem. Co. 11.

**MARION COUNTY**

**Rigs**

Toothman, Owens B. & M. Co. 1.
Hibbs, S. N. Elliott 3.

**MONONGALIA COUNTY**

**Rig**

Wright, Carnegie Gas Co. 1.

**Wells Drilling**

Kennedy hrs., Pgh. & W. Va. G. Co. 1.
Tennant, Pgh. & W. Va. G. Co 1.
Bell, Pgh. & W. Va. G. Co. 2.
Varner hrs., Dunn Mar O. & G. Co. 4.
Moore, So. P. O. Co. 2.

**WETZEL AND TYLER COUNTIES**

**Rigs**

Antill, Johns Gas Co. 7.
Eddy, McIntyre Bros. 1.
Carney, Hope Gas Co. 1.
O'Neil, Local Company 1.
Stump, Mfrs. L. & H. Co. 3.
McGinnis, H. L. Lambert 2.

**Wells Drilling**

Peterson, John Gas. Co. 6.
Fox, Mfrs. L. & H. Co. 1.
Riter, Hope Gas Co. 6.
Jackson, Hope C. & R. Co. 1.
Tuttle, Hope C. & R. Co. 7.
Miller, Hope C. & R. Co. 1.

**MARSHALL COUNTY**

**Rigs**

Boner, Decem Dev. Co. 6.
Conway, Carnegie Gas. Co. 7.
Campbell, Conway & Co. 1.
Jochum, Spider O. & G. Co. 1.
Rogerson, Wasmuth & Co. 1.
Thomas hrs. Mfrs. L. & H. Co. 3.

**Wells Drilling**

Riter, Mfrs. L. & H. Co. 3.
Keller, Mfrs. L. & H. Co. 6.
Riter, Mfrs. L. & H. Co. 1.
Risia, Hicks O. & G. Co. 1.
Minkmire, Decem Dev. Co. 1.
Newman, Wood & Co. 1.

**DODDRIDGE COUNTY**

**Rigs**

Flint hrs., Southern Oil Co. 4.
Ford, Buckeye O. & G. Co. 1.
Slattler, W. D. Gribble 1.
C. L. Ford, Trainer & Ash 1.
Shrader, Carnegie Gas Co. 4.
Smith, Hope C. & R. Co. 6.

**Wells Drilling**

Williams, Conservative O. Co. 2.
Haney, Marsh & Co. 1.

**RITCHIE COUNTY**

**Rigs**

Bush, Ohio F. O. Co. 2.
Smith, Auburn Oil Co. 1.
Ehret, Hope Gas Co. 4.
Spicer, Pgh. & W. Va. G. Co. 1.
Zinn, Pgh. & W. Va. G. Co. 3.
W. Va. Tract, Whitewood Oil Co. 27.
W. Va. Tract, Wiles & Co. 22.
W. Va. Tract, Wyatt & Co. 11.
Mason, P. H. McDonough 1.
Anderson, Big Sand Oil Co. 1.
Bowie hrs., Meadow Run O. Co. 2.
Bradford, Rico O. & G. Co. 3.
Hardwick, Hardwick & Co. 2.
Mullenax, Loomis & Co. 1.

**Wells Drilling**

Britton, Carnegie Gas Co. 3.
Hodge, Hope Gas Co. 1.
Washburn, Carnegie Gas Co. 1.
Flesher, Mfrs. L. & H. Co. 1.
Radabaugh, Nay & Kintzer 2.
Carder, Carnegie Gas Co. 10.
McCosh hrs., Wison & Co. 1.
Wilson, W. R. Hays 1.
W. Va. Tract, Williams & Co. 32.
Jonas, Coss O. & G. Co. 3.
Howell, Moore & Co. 1.
Heck hrs., Darby & Son 2.
Mitchell, Rinehart & Co. 2.
Adams, Rawe Bros. 4.
Markle, Phila. Oil Co. 1.

**GILMER COUNTY**

**Rigs**

Tierney, Jas. Tierney 3.
Reynolds, Hope C. & R. Co. 1.
Fling, Ellis & Co. 2.

**Wells Drilling**

Wright, C. W. McCall & Co. 2.
Stump, Hope C. & R. Co. 1.

**WIRT COUNTY**

**Wells Drilling**

Eagle, J. L. Wilson 7.
Rathbone Oil Tract, Roberts Bros. 145.

**WOOD COUNTY**

**Rigs**

Richardson, So. P. O. Co. 13.
Grant, So. P. O. Co. 19.
E. Grant, Congson & Co. 11.

**Wells Drilling**

Stagg, Penacle O. & G. Co. 1.
Wharton, So. Po O. Co. 4.
S. Grant, So. P. O. Co. 18.
Rost, White Sand G. Co. 3.

**PLEASANTS COUNTY**

**Wells Drilling**

Flesher, Cleary & Co. 1.
Wagner, Albert Neely 1.
Varner, Adam Ward 12.
Cumblidge, Albert Neely 1.

**ROANE COUNTY**

**Wells Drilling**

Nichols, So. P. O. Co. 1.
Dixon, Green Creek O. Co. 1.
Conley, Heckert & Co. 3.
Brown, Heckert & Co. 5.
Beaman, O. F. O. Co. 1.

**CALHOUN COUNTY**

**Rigs**

Richards, Chemical Oil Co. 1.
Cross, Hope C. & R. Co. 1.

**Wells Drilling**

Summers, M. F. Crowley 1.
Blake, Hope Gas Co. 1.
Stump, Hope Gas Co. 1.
Simmers, White Pine O. & G. Co. 1.
Stalnaker, Phila Oil Co. 3.

**MASON COUNTY**

**Rig**

McMillan, Ohio F. O. Co. 2.

**CLAY COUNTY**

**Rigs**

Stockly, So. P. O. Co. 20, 23, 24, 25, 26, 27.
Belcher, So. P. O. Co. 7.
Caston, Ohio F. O. Co. 11.
Caston, Virginian G. & O. Co. 13.
Brown, Goshorn & Co., Virginian G. & O. Co. 8.

**Wells Drilling**

Stockly, So. P. O. Co. 17, 22, 23.
Kyle, So. P. O. Co. 2, 4, 7.
Belcher, So. P. O. Co. 2, 4, 5, 6.
Casto, Ohio Fuel Oil Co. 10.
Casto, Virginia G. & O. Co. 12.
Swan, Brown & Co., Virginian G. & O. Co. 7.
Brown, Swan & Co., Virginian G. & O. Co. 9, 10.
Young, Empire Pet. Co. 2.

**LINCOLN COUNTY**

**Rigs**

Egnor, Col. G. & E. Co. 1.

**Wells Drilling**

Cooper, Union O. & G. Co. 1.
Lovejoy, Col. G. & E. Co. 1.
R. Lovejoy, Col. G. & E. Co. 1.
Sias, Roy McComas 1.
Lockwood, Ray Gas Co. 2.
Lucas, Maul Rock G. Co. 2.
Lawson, Grant Gas Co. 2.
S. Lawson, Laurel Dev. Co. 1.
Harris, Cambridge Gas Co. 1.
Horse Creek L. & M. Co., Cambridge Gas Co. 1.
Linnville, Cambridge Gas Co. 4.
Weatherall, So. P. O. Co. 1.
Hill, Downing Gas Co. 1.
Simpson, Sovereign Gas Co. 2.

**KANAWHA COUNTY**

**Rigs**

Fogarty, U. F. G. Co. 1.
Cobb, U. F. G. Co. 1.

**Wells Drilling**

Taylor, U. F. G. Co. 1.
Woods, U. F. G. Co. 1.

**BOONE COUNTY**

**Wells Drilling**

Sneed, U. F. G. Co. 1.
Robson-Prichard, U. F. G. Co. 1.
Gibwon, U. F. G. Co. 1.
L. R. & P. Tract, Pure Oil Co. 26, 21, 20.
Warren, Pure Oil Co. 1.
Bone, Pure Oil Co. 1
Coon, Pure Oil Co. 1.
Williams Coal Co., Pure Oil Co. 227.
L. R. & P. Tract B, Pure Oil Co. 19.
Miller, Owens B. & M. Co. 1.
L. C. & L. Co., Owens B. & M. Co. 4.
Bedford hrs., Owens B. & M. Co. 10.
C. R. M. Co., Owens B. & M. Co. 26.
Bull Creek C. Co., Owens B. & M. Co. 6.
Cassingham, Owens B. & M. Co. 10.
Prichard-Robson, Roy & McComas 3.
Sherman, G. L. Cabot 1.
Wilson, Cameron & Co. 1.
Cole-Crane, Hope Gas Co. 3.
L. C. C. Co., Aileen, O. & G. Co. 16.
Costerman, Aileen, O. & G. Co. 11.
Cotigo Dev. Co., Pure Oil Co. 2.

**PUTNAM COUNTY**

**Wells Drilling**

Eggleton, Teays Prod. Co. 1.

**CABELL COUNTY**

**Wells Drilling**

Collins, Sweetland & Co. 1.

**WAYNE COUNTY**

**Well Drilling**

Anderson, A. B. McGrew, Jr. 1.
Rigs 60; wells drilling 123; total 183.

## SOUTHWEST PENNSYLVANIA
## Wells Completed

**WASHINGTON COUNTY**

| | |
|---|---|
| Durbin, E. H. Tague & Co. 2 | dry |
| Taylor, J. R. Taylor & Co. 1 | gas |
| Boone, E. H. Robertson 1 | gas |
| Bedillion, Day & Bumgard 1 | 6 |

**ALLEGHENY COUNTY**

| | |
|---|---|
| Matchett, Clinton O. & G. Co. 1 | gas |
| Huggins, Pinkerton & Co. 1 | 3 |
| Aulston, Nickless & Miller 1 | gas |
| Speer, Martin & Co. 1 | gas |
| O'Neill, Steer & Co. 1 | 3 |
| Dusold, Robinson Bros. 1 | 6 |

**BEAVER COUNTY**

| | |
|---|---|
| Dawson, Reed & Co. 2 | 7 |

**GREEN COUNTY**

| | |
|---|---|
| Rose, Phila. Gas Co. 1 | dry |
| Minor, Phila Gas Co. 1 | gas |
| Hagen, Bell & Co. 1 | dry |
| Fordyce, Clovis & Co. 1 | gas |
| Hemkins, Carnegie Gas Co. 2 | gas |
| Grimes, Mfrs. L. & H. Co. 1 | gas |
| Antel, Carnegie Gas Co. 1 | gas |
| Scott, Consumers Fuel Co. 1 | gas |

Wells completed 19; production 24; dry 3; gas 11.

**WASHINGTON COUNTY**

**Rigs**

T. T. & T. Co., E. H. Tague & Co. 1.

**Wells Drilling**

Hathaway, Mfrs. L. & H. Co. 2.

**ALLEGHENY COUNTY**

**Rigs**

Dean, Pinkerton & Co. 1.
Kirsh heirs, Mellon & Pollock 1.
Casley, Robinson Bros. 1.

**Wells Drilling**

Malchett, Clinton O. & G. Co. 2.
Willoughby, Pinkerton & Co. 1.
Elliott, Elliott & Co. 1.
Dean, McClay Bros. 1.
Wilson hrs., R. L. Oles 1.
Duthil Tract, W. H. Say 10.
Ickley, Harbison & Co. 1.
Shannon, Sohn & Co. 1.
Wallace, Parker & Co. 4.

**GREENE COUNTY**

**Rigs**

Headley, So. P. O. Co. 3.
Wright, Carnegie Gas Co. 1.
Kennedy, Carnegie Gas Co. 1.
Clovis hrs., Mfrs. L. & H. Co. 4.
Chess, McCracken & Co. 1.
Conklin, Phila Co. 1.
Graham, Phila. Co. 1.
Moore, Phila Co. 1.
Pettit, Phila Co. 3.
Rutan, Consumers Fuel Co. 2.
Anderson, Consumers Fuel Co. 2.
Shippem, Carnegie Gas Co. 1.
Reese, Carnegie Gae Co. 1.
J. S. Ratan, Carnegie Gas Co. 3.
Tripp, Carnegie Gas Co. 1.

**Wells Drilling**

Murrian, Peoples Gas Co. 1.
Lemley, Peoples Gas Co. 1.
Fox, Phila Co. 1.
Lemly hrs., Fox O. & G. Co. 1.
Neill, Carnegie Gas Co. 1.
Bowers, Carnegie Co. 1.
Williamson, Carnegie Co. 1.
Haines, Carnegie Co. 1.
Longanaker, J. L. Garad 5.
Henen, Mfrs. L. & H. Co. 2.
Webster, N. G. Co. of W. Va. 1.
Grim, G. B. Patterson 1.
Hamilton, Meales & Co. 2.
Kinney, Hamilton & Co. 1.
Berdine, Dunn Mar O. & G. Co. 3.
Pettit, Phila Co. 2.
Hopkins, Mfrs. L. & H. Co. 1.
T. F. Rutan, N. G. Co. of W. Va. 4.
McClelen, Carnegie Gas Co. 1.
Phillips, Sutton & Co. 1.
Tripp, Black & Co. 2.
Rigs 19; wells drilling 30; total 49.

## SOUTHEASTERN OHIO
## WELLS COMPLETED

**MONROE COUNTY**

| | |
|---|---|
| Ackerman, Jumbo Oil 2 | dry |
| Sutor, Shear & Co. 5 | 3 |

**HOCKING COUNTY**

| | |
|---|---|
| Anthony, Gordon Oil Co. 4 | dry |
| H. V. P. Co., Chartiers Oil 197 | 25 |
| H. V. P. Co., Chartiers Oil 199 | 55 |
| Hazelton heirs, Big Ten O. & G. 2 | 65 |

**HOLMES COUNTY**

| | |
|---|---|
| Hammontro, East Ohio Gas 1 | gas |
| Pyers, O. F. G. Co. 2 | dry |
| Davenport, Empire G. & F. 2 | gas |
| Gelb & Co., Ark. Fuel Oil Co. 2 | gas |
| Netherow, Empire G. & F. 1 | 50 |
| Shuler, Globe O. & G. 1 | 50 |
| Bell, East Ohio Gas 2 | 20 |
| Kendall, East Ohio Gas 6 | 15 |
| Carnot-Miller, Pure Oil Co. 3 | 50 |

**GUERNSEY COUNTY**

| | |
|---|---|
| Watson, O. F. O. Co. 1 | gas |
| Morrison, O. F. O. Co. 1 | gas |
| Unterzumber, Cambridge O. & G. 2 | gas |

**LICKING COUNTY**

| | |
|---|---|
| Young, Selor O. & G. 3 | dry |
| Montgomery, E. H. Everett Co. 6 | 195 |
| Phillips, Hope C. & R. 2 | 105 |
| Stitt, Whitehill & Co. 5 | 85 |
| Jaynes & Co., E. H. Everett Co. 3 | 180 |
| Forry, Edmonds & Co. 8 | 8 |
| Forry, Ohio F. S. Co. 1 | 5 |
| Hamsberger, O. F. S. Co. 3 | 4 |
| Pound, Farmer & Co. 2 | 1 |
| Pound, Farmer & Co. 3 | 8 |
| McCormick, Patton & Co. 3 | 4 |
| McKinney, North Fork O. Co. 26 | 4 |
| Butler, North Fork Oil 1 | dry |
| Van Winkle, Preston Oil 2 | 100 |
| Myers & Co., Leonard O. & G. 3 | 3 |
| Myers & Co., Leonard O. & G. 4 | 3 |
| Dugan, Ark. Fuel Oil Co. 15 | 5 |
| Orr, Smith Haslett & Co. 3 | 4 |

Guthridge, Detex O. & G. 4 ..... 2
Cooperrider, Midland Oil Co. 2 ..... dry

**MORGAN COUNTY**

Bell, Dailey Oil Co. 2 ..... 2
Fletcher, Swingle O. & G. 6 ..... gas
Fye, Pure Oil Co. 8 ..... gas
Hughes, Pure Oil Co. 6 ..... 20
Glass, Dailey & Son 1 ..... dry
Fye, Sun Oil Co. 1 ..... 5
Bush, Pure Oil Co. 4 ..... 25

**KNOX COUNTY**

Heaton, Pure Oil Co. 2 ..... 80

**NOBLE COUNTY**

Misel, Hall & Co. 3 ..... 2
Wagner, Hutchinson & Co. 2 ..... 1
Miller, Saling & Co. 2 ..... 1
Hupp, Schott & Co. 2 ..... 2

**ATHENS COUNTY**

Biddle, Biddle O. & G. 6 ..... 20
Lax, Egan & Co. 1 ..... dry
Higgins, Gross & Co. 4 ..... 10
Atkinson, Ohio O. & G. 4 ..... 15
Baker, Ohio O. & G. 5 ..... 3
Atkinson, Ohio O. & G. 5 ..... 3
State Hospital, Gross & Co. 1 ..... 3
Biddle heirs, Biddle O. & G. 3 ..... 4

**WASHINGTON COUNTY**

Bergen Oil Co., J. E. Patterson 6 ..... 15
Robinson, Holman & Co. 1 ..... gas
Zimmer, Palmer & Co. 2 ..... dry
Devol, Miracle Oil 2 ..... dry
Gilchell heirs, Henderson Oil 3 ..... 15
Beach heirs, E. A. Metcalf 7 ..... dry
Schram, Clymer & Co. 3 ..... 30
Mosser, Henning & Co. 11 ..... 15
Bowersock, Campbell & Co. 2 ..... 4

**BELMONT COUNTY**

Burke, Slack & Co. 4 ..... 2

Wells completed ..... 68
Production ..... 1254
Dry ..... 11
Gas ..... 9

**MONROE COUNTY**

**Rigs**

Piatt, Sylvan O. & G. 1.

**PERRY COUNTY**

**Rigs**

McCullough, Hope C. & R. Co. 1.
Ruff, Sharpneck & Co. 2.
Friehl heirs, Sturm & Co. 1.
Guy, Cline Brothers 1.

**Wells Drilling**

Roger Bros., Holden estate 22.
Miller, Plant Oil Co. & Co. 1.
Miller, Plant Oil Co. 1.
Trimmer, O. F. S. Co. 7.
Acker heirs, Murray City O. & G. 8.
Sunday C'k C. Co., Sunday C'k C. Co. 136.
S. H. C. Co., S. H. C. Co. 2.
Fletcher, Schnedker Bros. 1.
Long, Craig Adair 1.

**HOCKING COUNTY**

**Rigs**

Mulerim, Gordon Oil Co. 2.
H. V. P. Co., Chartiers Oil 200.

**Wells Drilling**

Anthony, Gordon Oil 5.
Campbell, Rattlesnake O. & G. 1.
Thrush, Thrush O. & G. 2.
Pierpoint, Pierpoint O. & G. 2.
Harden, O. F. S. Co. 2.
Thomas, Griffin Prod. 6.
Thomas, Marlow O. & G. 4.
Mowery, Fellowship O. & G. 1.
Blair, Jewell O. & G. 1.
H. V. P. Co., Chartiers Oil 197.
Tracey estate, Kachelmacher estate 21.
Chute heirs, Red Top O. & G. 8.

**HOLMES COUNTY**

**Rigs**

Snow, Kemrow Co. 1.
Steel, Empire G. & F. 1.
Uhl, Pure Oil Co. 1.
Close, Pure Oil Co. 2.

**Wells Drilling**

Carpenter, East Ohio Gas Co. 1.
Middaugh, Ohio Oil Co. 1.
Mohr, Ohio Oil Co. 2.
B. Middaugh, Leonard O. & G. 1.
Rambacker, Ohio F. G. Co. 1.
Bell, Bell O. & G. 1.
Netherow, Empire G. & F. 2.
Bridges, Empire G. & F. 2.
Donald, Empire G. & F. 1.
Schlarb, East Ohio Gas Co. 1.

**GUERNSEY COUNTY**

**Rigs**

Ford, Ohio Fuel Gas 1, 2.
Forney, Ohio Fuel Gas 1.
Mercer, Ohio Oil Co. 1.
Williams, Logan Gas Co. 4.
McBride, Withmer, trustee 1.

**Wells Drilling**

Shriver, Ohio Fuel Gas 1.
Archer, Ohio Fuel Gas 1.
Woodburn, Ohio Fuel Gas 1.
McHaffey, Ohio Oil Co. 1.
Keith, Ohio Oil Co. 1.
Spear, Ohio Oil Co. 1.
Knight, Big Lime Oil 2.
Gibson, Matthews & Co. 1.
Fulton, Stolz & Co. 1.

**LICKING COUNTY**

**Rigs**

Weekly, Plant Oil Co. 5.
Porter, Everett Co. 4.
Hupp, Midland Oil Co. 1.
Armstrong, Flint Rirge O. & G. 6.

**Wells Drilling**

Coomis, Soules & Co. 1.
Brown heirs, Pure Oil Co. 1.
Brown, Hope C. & R. 1.
Walcott heirs, E. H. Everett Co. 2.
Hamsberger, O. F. S. Co. 4.
McKinney, North Fork Oil 21.
Mossholder, Murphy Oil Co. 2.
Wright, Kemrow Oil Co. 1.
Buford, Ohio Fuel Supply 1.
Martin, Hope C. & R. 1.
Dispennette, J. T. Bebout 3.
Franks, Detex O. & G. 6.
Wolfe, Moore & Adams 1.
Minor, Hope C. & R. 1.
Hanover Brick Co., Hope C. & R. 2.
Bogle, Midland Oil Co. 2.
Uffner, Hope C. & R. 1.

**MUSKINGUM COUNTY**

**Wells Drilling**

Boyer, M. F. Whitehill 6.
Shrumm, Heisey & Co. 1.
Irwin, Pure Oil Co. 1.

**COSHOCTON COUNTY**

**Rigs**

McKee, Spindler, Dolan & Co. 4.
Fyers, Ohio Oil Co. 1.
Fair, Ohio Oil Co. 15.

**Wells Drilling**

Norris, Leonard O. & G. 3.

**MORGAN COUNTY**

**Wells Drilling**

Stiner estate, Dailey Oil Co. 1.
Fletcher, Swingle O. & G. 7.
Fye, Pure Oil Co. 9.
Barringer, Pure Oil Co. 12.
Spurier, Bowman O. & G. 1.
Jay, O. F. S. Co. 1.
Newton, Cameron O. & G. Co. 1.
Fye, Sun Oil Co. 2.
Epley, Pure Oil Co. 10.
M. Epley, O. F. S. Co. 2.

**KNOX COUNTY**

**Rigs**

Heaton, Pure Oil Co. 21.

**Wells Drilling**

Logsdon, Upham Gas Co. 1.
Hagans, Reed Drilling Co. 1.
Brown, East Ohio P. & R. 5.

**NOBLE COUNTY**

**Rigs**

Harper, Wickens & Co. 6.

**Wells Drilling**

Smithson, O. O. Kinsey 11.
Longfellow, Wash. Noble Co. G. Co. 1.
Williams, Herda O. & G. 4.
Hill, Harper & Co. 1.
Watson, O. F. S. Co. 1.
Brown, Yearin & Co. 2.
Estadt, Sheetz & Co. 3.
Carpenter, Myers & Co. 1.

**ATHENS COUNTY**

**Wells Drilling**

Murphy, Southern Oil Co. 5.
Brooks, Cooke & Co. 1.
Lax, Harmon & Co. 1.

**MEIGS COUNTY**

**Wells Drilling**

Snowball, Benedict & Bush 1.
Singer, Meigs & Summer O. & G. 1.
McBride, Clifton & Co. 3.

**WASHINGTON COUNTY**

**Rigs**

Patterson, Peoples B. & T. Co. 6.
McConnell, Clark & Todd 7.
Newlon, Dailey & Co. 4.
Reeder, D. C. Reeder 44.
Higgins, Graw & Co. 4.
Bell, Patterson & Co. 1.
Hupp-Murray, Beeson & Athey 11.

**Wells Drilling**

Howell, Bentz Oil Co. 2.
Whiston, Rose & Co. 3.
Heintzelman, Harrison & Co. 1.
Williams, Carner & Co. 1.
Wolfort, Meister & Co. 14.
Wharton, Ward & Co. 1.
Mosser, Henning & Co. 12.
Decker, Decker & Co. 7.

**JEFFERSON COUNTY**

**Wells Drilling**

Campbell, Kelley & Co. 1.

**HARRISON COUNTY**

**Wells Drilling**

Dunlap, F. N. Donaldson 1.
Wright, Osborne & Co. 5.

**CARROLL COUNTY**

**Wells Drilling**

Harrington, N. G. Co. of W. Va. 2.
Dorrence heirs, Brown & Co. 1.

**BELMONT COUNTY**

Jeffers, Hamilton & Co. 1.

**COLUMBIANA COUNTY**

**Wells Drilling**

Teeters, Benninghoff & Co. 13.
Hoffman heirs, Canton Parties 3.
Davidson, John Davidson 4.
Rigs, 33; wells drilling, 105; total, 138.

## CENTRAL OHIO

**Summary of Field Operations**

| District— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl |
|---|---|---|---|---|---|---|---|
| Knox | 1 | 0 | 1 | 0 | 0 | 6 | 6 |
| Ashland | 2 | 0 | 0 | 2 | 7 | 7 | 14 |
| Medina | 1 | 0 | 1 | 0 | 5 | 6 | 11 |
| Lorain | 2 | 0 | 1 | 1 | 1 | 1 | 2 |
| Wayne | 1 | 0 | 0 | 1 | 5 | 11 | 16 |
| Holmes | 10 | 493 | 1 | 4 | 9 | 9 | 18 |
| Athens | 2 | 0 | 0 | 2 | 3 | 7 | 10 |
| Coshocton | 2 | 102 | 0 | 1 | 4 | 3 | 7 |
| Guernsey | 5 | 0 | 0 | 5 | 13 | 8 | 21 |
| Cuyahoga | 2 | 0 | 1 | 1 | 2 | 9 | 11 |
| Ttl. May | 28 | 595 | 5 | 17 | 49 | 67 | 116 |
| Ttl. April | 32 | 181 | 6 | 18 | 29 | 47 | 76 |
| Difference | 4 | 414 | 1 | 1 | 20 | 20 | 40 |

**WELLS COMPLETED**

**KNOX COUNTY**

Jefferson—Geo. W. Schultz, J. B. Reed & Co. 1 ..... dry

**ASHLAND COUNTY**

Orange—J. F. Brockaway, Logan Gas 2 ..... gas
Greene—J. F. Jones, Ohio Fuel Gas 1.. gas

Wells completed ..... 2
Gas ..... 2

**MEDINA COUNTY**

Chatham—Goodyear, Harry Dempsey 1 dry

**LORAIN COUNTY**

Columbia—C. & I. Chope, Dillon & Mc-Frederick Bros. 1. ..... gas
Huntington—Cath. Cassell, East Ohio Gas 1 ..... dry

Wells completed ..... 2
Dry ..... 1
Gas ..... 1

**WAYNE COUNTY**

Wayne—J. B. Yoder, W. E. Hawk & Co. 1 ..... gas

**HOLMES COUNTY**

Monroe—U. S. Davenport, Empire Gas & Fuel 2 ..... gas
W. H. Geib, Arkansas Fuel Oil 2... gas
Prairie—W. F. Kendall, East Ohio Gas 6 ..... 8
Miller, Pure Oil 3 ..... 135
Paint—E. M. Miller, Logan Gas 1 ... gas
Hardy—D. Netherow, Empire Gas & Fuel 1 ..... 135
Geo. Schuler, Warren Palmer & Co. 1 125
Harvey Bell, East Ohio Gas 2..... 90
Bilbuck — Chas. Hammondtree, East Ohio Gas 1 ..... gas
Isaac Pyers, Ohio Fuel Gas 1..... dry

Wells completed ..... 10
Oil wells ..... 5
Production ..... 493
Gas ..... 4
Dry ..... 1

**ATHENS COUNTY**

Carthage—E. Cole, Logan Gas 1..... gas
Troy—H. F. Richardson, Bowser & Co. 1 ..... gas

Wells completed ..... 2
Gas ..... 2

**COSHOCTON COUNTY**

Perry—Van Winkle, Logan Gas 2..... 102
Newcastle—Cassingham, Cassingham & Bell Bros. 11 ..... gas

Wells completed ..... 2
Oil wells ..... 1
Production ..... 102
Gas ..... 1
Gas ..... 1

**GUERNSEY COUNTY**

Adams—Frank Ankrum, Ohio Oil 2... gas
Seward R. Williams, Logan Gas 3... gas
L. W. Unterzumaier, Cambridge Gas 2 ..... gas
Cambridge—W. C. Morrison, Ohio Fuel Gas 1 ..... gas
C. O. Watson, Ohio Fuel Gas 1 ... gas

Wells completed ..... 5
Gas ..... 5

**CUYAHOGA COUNTY**

Dover—F. A. Weston, Preston O'l 1.... gas
Strongville—E. I. Gifford, East Ohio Gas 1 ..... dry

Wells completed ..... 2
Dry ..... 1
Gas ..... 1

**KNOX COUNTY**

**Wells Drilling**

Jefferson—J. Rowland, Ohio Fuel Gas 1.
Jacob Greer, James E. Greer 1.
C. Arwiller, East Ohio Gas 2.
Peter Kaufman, East Ohio Gas 1.
Bert Nyhart, I. E. O'Nail 2.
Cath. Lohsdon, Upham Gas 1.
Rigs, 6; wells drilling, 6; total, 6.

**ASHLAND COUNTY**

**Rigs**

Orange—K. H. Flute, Logan Gas 1.
J. A. Albright, Logan Gas 1.
Hanover—M. D. Leatherow, Ohio Fuel Gas 1.
J. H. Miller, East Ohio Gas 1.
Greene—J. R. Walton, Logan Gas 1
P. C. Cowen, Logan Gas 5.
Mifflin—Martha King, Geiger & Barnhart 1.

**Wells Drilling**

Orange—Wm. H. Brandt, Logan Gas 1.
H. B. Wertman, Logan Gas 3.
Hanover—A. C. Hazlett, Logan Gas 1.
Sullivan—Addison Stentz, Logan Gas 1.
J. A. Spencer, Klise-Eckstein-McCann 2.
Greene—Gottlieb Koch, Ohio Fuel Gas 1.
Clear Creek—L. C. McClain, Savannah Oil & Gas 1.
Rigs, 7; wells drilling, 7; total, 14.

**MEDINA COUNTY**

**Rigs**

Litchfield—Cora B. Pfeifer, Hulse & Kundtz 1.
Westfield—T. & L. England, Logan Gas 1.
Lafayette—H. S. Koppes, Ohio Fuel Gas 1.
York—Frank Patlowany, Logan Gas 1.
Granger—A. Rockwood, Empire Gas & Fuel 1.

**Wells Drilling**

Montville—E. L. McFadden, Ohio Fuel Gas 1.
Lafayette—R. O. Wheeler, Ohio Fuel Gas 1.
Liverpool—Albert Trefany, Ohio Fuel Gas 1.
N'cholas A. Granson, Logan Gas 1.
York—Frederick Bawer, Hulse & Kundtz 2.
Chatham—Isaac Kent, Star Oil 3.
Rigs, 5; wells drilling, 6; total, 11.

**LORAIN COUNTY**

**Rigs**

Grafton—Jos. A. Rising, Logan Gas 1.

**Wells Drilling**

Columbia—S. A. Ives, Empire Gas & Fuel 1.
Rigs, 1; wells drilling, 1; total, 2.

**WAYNE COUNTY**

**Rigs**

Wooster—Lee Martin Ohio Oil 3.
Jas. M. Correll, Ohio Oil 4.
Greene—C. S. & C. A. Eby, W. E. Hawk & Co. 1, 2.
Franklin—D. E. & Ida Schmuck, Ohio Oil 11.

**Wells Drilling**

Milton—C. W. Frick, East Ohio Gas 2.
Greene—A. J. Shissler, Logan Gas 1.
Chippewa—J. Muick, East Ohio Gas 1.
Paint—J. M. Westcott, Ohio Fuel Gas 1.
Cannan—T. A. Morrow, Wm. Denny & Co. 1.
Mary Giffin, J. M. Mays & Co. 3.
Congress—O. E. Frank, Logan Gas 2.
Stanley Smith, Ohio Fuel Gas 1.
S. A. Swanson, Warren Palmer & Co. 2.
C. Spreng, Arco Oil 3.
Clayton Good, Glen Harmon & Co. 2.
Rigs, 5; wells drilling, 11; total, 16.

**HOLMES COUNTY**

**Rigs**

Monroe—Oscar Steel, Empire Gas & Fuel 1.
Prairie—Lee Durbin, Pure Oil 3.
Paint—Levi Weaver, Logan Gas 1.
Hardy—Dave R. Anderson, East Ohio Gas 3.
Warren R. Close 84 a., Pure Oil 2.
Warren R. Close 14 a., Pure Oil 3, 4, 5.
Mrs. Wilson Pyers, Pure Oil 1.

**Wells Drilling**

Monroe—Lizzie Rumbacher, Ohio Fuel Gas 1
Paint—Yost Weaver, Ohio Fuel aGs 1.
Hardy—Lewis Donald, Empire Gas & Fuel 1.
D. Netherow, Empire Gas & Fuel 2.
Mary E. Bridges, Empire Gas & Fuel Co. 2
C. E. Schlarb & Co., East Ohio Gas 1.
Kilbuck—Sanford Carpenter, East Ohio Gas 1.
Rachael Mohr, Ohio Oil 2.
Albert Smith, Ohio Oil 1.
Rigs, 9; wells drilling, 9; total 18.

**ATHENS COUNTY**

**Rigs**

Carthage—J. M. & M. Barnhill, Logan Gas 1.
J. B. & S. Ninnegemyer, Logan Gas 1.
Waterloo—Lafayette Hewitt, Guenther & Co. 2.

**Wells Drilling**

Carthage—J. E. Bailey, Jay Oil & Gas 9.
G. E. Bradford, Goddard & Cunningham 1.
Oliver Davis, Hawkins & Co. 1.
J. L. Yarner, Fairfield Gas 1.
Edward Burk, C. W. Nuzum 2.
Elijah Dunlavy, Ohio Fuel Supply 1.
Rome—E. S. Byron, H. W. Leeper & Co. 3.
Rigs, 3; wells drilling, 7; total, 10.

**COSHOCTON COUNTY**

**Rigs**

Perry—Rudolph T. Rine Logan Gas 1.
Newcastle—Rodenour Canal Bed, Cline Bros. 1.
Monroe—Guy Pyers, Ohio Oil 1.
Linton—Cliff McFarland, Ohio Fuel Supply 1.

**Wells Drilling**

Perry—Marion G. Wright, Klise-Eckstein-McCann 1.
W. Mooholder, Murphy & Co. 2.
Newcastle—Cassingham, Cassingham & Bell Bros. 12.
Rigs, 4; wells drilling, 3; total, 7.

**GUERNSEY COUNTY**

**Rigs**

Adams—George Bell, Ohio Fuel Gas 1.
Anna M. Jerels, Ohio Fuel Gas 1.
W. L. Ford, Ohio Fuel Gas 1, 2.
C. O. Watson, Ohio Fuel Gas 1.
Riley Moon, Ohio Fuel Gas 1.
G. C. Smith, Ohio Fuel Gas 1.
M. K. Wells, Logan Gas 1.
S. R. Williams, Logan Gas 4.
T. P. Speer, Ohio Oil 2.
Cambridge—Harry M. Steel, Ohio Fuel Gas 1.
Wheeling—Cana Forney, Ohio Fuel Gas 1.
Howard Beeks, Logan Gas 1.

**Wells Drilling**

Adams—W. C. Morrison, Ohio Fuel Gas 1.
Albert Woodbury, Ohio Fuel Gas 1.
Lola Shriver, Ohio Fuel Gas 1.
J. C. Ankrum, Ohio Fuel Gas 1.
Finley Keith, Ohio Oil 1.
T. B. Speer, Ohio Oil 1.
Alice B. Mehaffey, Ohio Oil 1.
James Mercer, Ohio Oil 3.
Rigs, 13; wells drilling, 8; total, 21.

**CUYAHOGA COUNTY**

**Rigs**

Middleburg—P. & A. Jenke, East Ohio Gas 1.
Dover—James Jenkins, Hulse & Kundtz 1.

**Wells Drilling**

Dover—E. & T. Rose, Logan Gas 1.
C. Nichols, Wiser Oil 1.
F. J. Inch, H. A. & W. J. Dempsey 1.
C. & C. M. Miller, J. C. Arthur & Simpson 1.
W. Glasgow, J. C. Arthur & Simpson 1.
W. H. Reeves, Mulford Portmann 1.
J. P. Deubel, Hulse & Kundtz 1.
Nallie E. Hodge, Hulse & Kundtz 1.
Strongville—B. H. & E. A. Adams, East Ohio Gas 1.
Rigs, 2; wells drilling, 9; total, 11.

## LIMA FIELD

**Summary of Field Operations**

| District— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Wood | 7 | 383 | 0 | 0 | 0 | 10 | 10 |
| Hancock | 6 | 117 | 1 | 0 | 0 | 9 | 9 |
| Allen | 4 | 31 | 0 | 0 | 0 | 5 | 5 |
| Auglaize | 5 | 35 | 2 | 0 | 0 | 5 | 5 |
| Sandusky | 3 | 30 | 0 | 0 | 0 | 2 | 2 |
| Mercer | 2 | 18 | 0 | 0 | 0 | 5 | 5 |
| Seneca | 1 | 0 | 1 | 0 | 0 | 1 | 1 |
| Lucas | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Ottawa | 3 | 29 | 0 | 0 | 0 | 3 | 3 |
| Shelby | 6 | 49 | 1 | 0 | 2 | 7 | 9 |
| Hardin | 4 | 92 | 0 | 0 | 1 | 3 | 4 |
| Darke | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Paulding | 0 | 0 | 0 | 0 | 2 | 1 | 3 |
| Logan | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Clark | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Michigan | 2 | 30 | 0 | 0 | 5 | 6 | 11 |
| Ttl. May | 43 | 814 | 5 | 0 | 10 | 62 | 72 |
| Ttl. April | 39 | 485 | 1 | 1 | 9 | 54 | 63 |
| Difference | 4 | 329 | 4 | 1 | 1 | 8 | 9 |

**WELLS COMPLETED**

**WOOD COUNTY**

Henry—M. Auverter Ohio Oil 32..... 20
John Marshall, Ohio Oil 18 ..... abd
Jacob Neier, Ohio Oil 12 ..... abd
Plain—Geo. W. Hartman, Ohio Oil 3, 9, 10, 20, 21 ..... abd
Bloom—A. Whitacre, Maxwell & Harkness 33 ..... 20
John Smith, Ohio Oil 14 ..... abd
Liberty—G. Otterback, Ohio Oil 3, 16, 11, 12, 13, 14, 15, 17, 20 ..... abd
John Miller, Ohio Oil 1, 5, 8, 9, 11, 13, 16 ..... a'd
Middleton—Chas. A. Tanner, Chas. A. Tanner 3 ..... 5
Perrysburg—Geo. Deverna, Oko Oil & Gas 5 ..... 40
Louisa Deverna, Oko Oil & Gas 3.... 20
Wm. Grolle, Sr., Huffman & Haas 3 28
Lake—Michaelson, Lantz, Schulte & Co. 2 ..... 250

Wells completed ..... 7
Production ..... 383
Abandoned ..... 24

**HANCOCK COUNTY**

Marion—Donhoff Bros., Donhoff Bros. 16 ..... 60
Liberty—T. G. Barnhill, S. E. Price 4 abd
Eagle—Frank Freed, R. T. Rittenhouse 3 ..... 20
Alice Stauffer, Star & Clark 9..... 20
Orange—Asa Stratton, Ohio Oil 24..... dry
Biglick—Frank Temple, Kirk & Fetcher 1 ..... 15
Union—W. S. King, N. E. Bryson 16 ... 2

Wells completed ..... 6
Production ..... 117
Dry ..... 1
Abandoned ..... 1

**ALLEN COUNTY**

Bath—P. D. Driver, O. T. Botkins & Co. 2 ..... 15
Spencer—Elmer Wilkins, Briggs Oil 1 4
Louis Mouser, Boyd & Stelzer 1 ... 2
American—J. E. Pierson, Mack P. Colt, 8 ..... 10
Marion — Breeneman-Huber, Mack P. Colt, No. 7, act. 1, 2, 3, 4, 5..... abd

Wells completed ..... 4
Production ..... 51
Abandoned ..... 5

**AUGLAIZE COUNTY**

Moulton—Klopfel & Shaffer, I. C. Robison 1 ..... 13
Douchouquet—C. Vossler, Vossler Oil 4 ..... 2
Fred Koch, Vossler Oil 1 ..... dry
Noble—L. Huffman, Ohio Oil 5 ..... abd
Salem—W. T. Seibert, Bachelor Oil 9.. 20
Pusheta—John Kantner heirs, Cook & Crow 1 ..... dry

Wells completed ..... 5
Production ..... 35
Dry ..... 2
Abandoned ..... 1

**SANDUSKY COUNTY**

Washington—J. H. Bergman, Ohio Oil 13 ..... 6

Amos Waggoner, Bell Oil 1 ..... 12
Jackson—W. D. Hummell, Hurry Up Oil 7 ..... 12
J. Gephart, Ohio Oil 1, 2 ..... abd

Wells completed ..... 3
Production ..... 30
Abandoned ..... 2

**MERCER COUNTY**
Center—Henry Wurster, Mack P. Colt & Co. 2 ..... 8
Wm. Smith, N. E. Masters 1 ..... 10

Wells completed ..... 2
Production ..... 18

**SENECA COUNTY**
Liberty—Leister & Tillotson, J. H. Murphy & Son 6 ..... dry

**OTTAWA COUNTY**
Harris—H. W. Nieman, Burman Oil 1 .. 5
E. W. Yeasting, Zorn-Hornung Oil 14 8
Catawba—Mrs. J. F. Byrnes, Catawba Oil & Gas 1 ..... 16

Wells Completed ..... 3
Production ..... 29

**SHELBY COUNTY**
Cynthian—J. Ellerman, Slagel & Johnson 1 ..... dry
J. Sherman, Wittmer Property, Trus. 1 ..... 3
J. H. Borhorst, Lee A. Watson 5.... 5
Chas. F. Broerman, Mansfield Oil & Gas 9 ..... 1
Frank Danzig, Fort Laramie Oil & Gas 4 ..... abd
McLean—Henry Ernst, L. T. McGrath. 1 ..... 20
Henry Ernst, L. T. McGrath 2 ..... 20

Wells completed ..... 6
Production ..... 49
Dry ..... 1
Abandoned ..... 1

**HARDIN COUNTY**
McDonel—Mary Clark Irwin, Boston-S. W. Oil & Gas 5 ..... 10
Polly McConnell, Boston-S. W. Oil & Gas 2 ..... 12
Floyd C. Stolder, Cockley Oil 1 ..... 60
E. McArthur, Roundhead Oil & Gas 4 ..... 10

Wells completed ..... 4
Production ..... 92

**MICHIGAN**
**SAGINAW COUNTY**
Saginaw—Northmoor Subdivision, Saginaw Prospecting 1 ..... 25
Blaine—Sanilac-St. Clair Prospecting 1 5

**WOOD COUNTY**
**Wells Drilling**
Henry—Franks, White-Hamman, Ohio Oil 44.
Liberty—Royal B. Mercer, Ohio Oil 11.
E. E. & J. H. Abbott, Hulse & Kundtz, 1.
Middleton—E. Rhinefrank, Rhinefrank Golf Club 1.
Frank Rogers, Otto A. Brown 7.
Perrysburg—Geo. Deverna, Oko Oil & Gas Co. 6.
Louisa Deverna, Oko Oil & Gas 4.
Grace Dauer, Oko Oil & Gas 2.
Webster—Mike Roller, John Geldin & Co. 2.
Lake—Andrew Gensen, Chas. F. Zeising & Co. 1.
Rigs, 0; wells drilling, 10; total, 10.

**HANCOCK COUNTY**
**Wells Drilling**
Liberty—Wm. Sawyer, Stitt & Sawyer 6.
J. K. Wheeler, Baseline Oil 5.
J. Steen, Baseline Oil 11.
Portage—C. L. Turley, Ohio Oil 9.
J. E. Morehead, north, Ohio Oil 12.
Allen—Hy Franks, P. J. Pool estate, 12.
Eagle—Jacob Fellers, Fuller & Co. 20.
Orange—A. E. Lugabill, Ohio Oil 12.
Biglick—L. Wonders, Ridge Oil & Gas Synd. 1.
Rigs, 0; wells drilling, 9; total, 9.

**ALLEN COUNTY**
**Wells Drilling**
Bath—P. D. Driver, O. T. Botkins & Co. 3.
Wm. Lenney, Chas. Geselchen & Co. 5.
S. H. Vore, C. A. Peavey & Co. 4.
Spencer—John A. Beerman, Gwinn Oil Co. 6.
Ed Reynolds, South Fork Oil 4.
Rigs, 0; wells drilling, 5; total, 5.

**AUGLAIZE COUNTY**
Mounton—J. H.—Gochenour, Ohio Oil 17.
Chas. Fritz, Wheeling & Zimmerman 1.
J. H. Harshbarger, Kelly Oil 2.
A. Sillin, I. C. Robison 1.
Salem—W. T. Seibert, Bachelor Oil 10.
Rigs, 0; wells drilling, 5; total, 5.

**SANDUSKY COUNTY**
**Wells Drilling**
Scott—W. O. Doll, Harley, Henderson & Warner 4.
Washington—Amos Waggoner, Bee Oil 2.
Rigs, 0; wells drilling, 2; total 2.

**MERCER COUNTY**
**Wells Drilling**
Center—Chas. Nolan N. E. Masters 4.
James M. Nolan, Ohio Oil 2.
Henry Wurster, M. P. Colt & Co. 3.
Recovery—Rose Fecher, Sam W. Tate, Jr., 3.
Jefferson—Hacker heirs, D. A. Miller & Co. 4.
Rigs, 0; wells drilling, 5; total, 5.

**SENECA COUNTY**
**Wells Drilling**
Clinton—A. E. Geyer, Arthur E. Geyer 1.

**LUCAS COUNTY**
**Wells Drilling**
Jerusalem—E. H. & M. A. Eck, Ohio Oil 21.
Monclova—Wm. Black, L. W. Vermilya, Receiver, 2.
Rigs, 0; wells drilling, 2; total, 2.

**OTTAWA COUNTY**
**Wells Drilling**
Harris—H. W. Nieman, Burman Oil 2.
J. H. Bergman, Ohio Oil 14.
Salem—A. H. Mylander, Oak Harbor Natural Gas 1.
Rigs, 0; wells drilling, 3; total, 3.

**SHELBY COUNTY**
**Rigs**
Cynthian—John Zimmerman, Wittmer property trustee, 3.
F. Borchers, Filerman Oil 1.
**Wells Drilling**
Cynthian—Theresa Goffena, Ohio Oil 2.
Theresa Goffena, E. E. Laughner 3.
J. Monnin, Lee A. Watson 1.
Frank Danzig, Ft. Laramie Oil & Gas 6.
McLean—Henry Ernst, L. F. McGrath 3.
John Ernst, Milleck & Co. 1.
Ex. Eilerman, Slagel & Johnston 1.
Rigs, 2; wells drilling, 7; total, 9.

**HARDIN COUNTY**
McDonel—A. B. Zimmerman, Sanford, Ulrich & Co. 6.
**Wells Drilling**
McDonel—Geo. W. Strawn, Boston-S. W. Oil & Gas 3.
Erwin Hites, Roundhead Oil & Gas 7.
Gilmore—Cockley, New York Coal Co. 2.
Rigs, 1; wells drilling, 3; total, 4.

**DARKE COUNTY**
**Wells Drilling**
Patterson—G. F. Trittchun, Lee A. Watson 1.

**PAULDING COUNTY**
**Rigs**
Harrison—C. C. Springer, John T. Schunck & Co. 5.
A. M. Bailey, U. S. A. Oil 6.
**Wells Drilling**
Jackson—Wm. Russell, Detroit-Cleveland Oil & Gas 1.
Rigs, 2; wells drilling, 1; total, 3.

**LOGAN COUNTY**
**Wells Drilling**
Belle Center—Mack, G. L. Schumacher & Co. 1.

**CLARK COUNTY**
**Wells Drilling**
Madison—Mattinson, T. D. Friend 1.

**MICHIGAN**
**SAGINAW COUNTY**
Saginaw—Casper W. Ulrich, Bliss Pet. 2.
Fred Engle, Bliss Petroleum 1.
E. E. Householder, Saginaw City Building Co. 1.
Mrs. Jane Marshall, Vorhees & Co. 1.
Oakley Street, Glenn R. Wilson & Co. 1.
**Wells Drilling**
Saginaw—John Palvas, Saginaw Prospecting 1.
Carl Boldebuck, Bliss Petroleum 1.
Adam Nuermyer, Sun Co., 1.
John Schonteit, Sun Co. 1.
Rigs, 5; wells drilling, 4; total, 9.

**JACKSON COUNTY**
**Wells Drilling**
Napoleon—Silvers, Jackson County Oil & Gas 1.

**MONROE COUNTY**
**Wells Drilling**
Dundee—Frank Roe, Jackson County Oil & Gas 1.

## ILLINOIS

**Summary of Field Operations**

| | Comp. | Prod. | Dry | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|
| Clark | 4 | 75 | 0 | 0 | 4 | 4 |
| Cumberland | 0 | 0 | 0 | 0 | 1 | 1 |
| Crawford | 7 | 38 | 2 | 0 | 5 | 5 |
| Lawrence | 1 | 0 | 1 | 1 | 4 | 5 |
| Wabash | 13 | 307 | 4 | 3 | 12 | 15 |
| Marion | 2 | 60 | 0 | 1 | 0 | 1 |
| Coles | 0 | 0 | 0 | 0 | 1 | 1 |
| Douglass | 0 | 0 | 0 | 0 | 1 | 1 |
| Jasper | 1 | 0 | 1 | 0 | 0 | 0 |
| Morgan | 1 | 0 | 1 | 0 | 1 | 1 |
| Fayette | 0 | 0 | 0 | 1 | 0 | 1 |
| Edwards | 0 | 0 | 0 | 0 | 1 | 1 |
| Randolph | 0 | 0 | 0 | 0 | 1 | 1 |
| Madison | 0 | 0 | 0 | 0 | 1 | 1 |
| McDonough | 0 | 0 | 0 | 0 | 1 | 1 |
| Total May | 29 | 480 | 9 | 6 | 33 | 39 |
| Total April | 27 | 281 | 12 | 9 | 41 | 50 |
| Difference | 2 | 199 | 3 | 3 | 8 | 11 |

**WELLS COMPLETED**
**CLARK COUNTY**
Parker—J. S. Phillips, Ohio Oil 25.... 3
J. S. Phillips, Ohio Oil 26 ..... 2
Westfield—W. R. Shuey, Adkins & Co. 1 5
Martinsville—Harriett Slater, Mahutska Oil 3 ..... 65

Wells completed ..... 4
Production ..... 75

**CRAWFORD COUNTY**
Martin—John Mulvane heirs, Frost Oil 2 ..... dry
Wm. Dunlap, Ohio Oil 1 ..... dry
Robinson—E. E. Newlin, Canadian Oil & Gas 15 ..... 5
Honey Creek—L. N. Tohill, Phipps Cawood & Co. 13 ..... 4
L. N. Tohill, Phipps, Cawood & Co. 14 ..... 10
C. A. Reaville, Sel y-Cisler Prod. 27 15
Wm. C. Haas, Gealy & McDowell 3.. 4

Wells completed ..... 7
Production ..... 38
Dry ..... 2

**LAWRENCE COUNTY**
Dennison—James Armstrong, Phipps, Blosser & Co. 1 ..... dry
C. M. Lewis, Snowden-McSweeny Co. 5, 8 ..... abd
Bridgeport—Jas. R. King, Ohio Oil 30 abd

Wells completed ..... 1
Dry ..... 1
Abandoned ..... 3

**WABASH COUNTY**
Wabash—J. F. Stillwell, Mahutska Oil 7 ..... dry
Dave H. Price, Jos. S. Young, Jr. & Co. 2 ..... 55
J. W. Price estate, Hupp, Duff & Co. 1 ..... dry
Price heirs, Black Gold Oil 3 ..... dry
F. M. Leak, Mt. Carmel Oil 4 ..... 55
Jemima Cisil, W. C. McBride, Inc. 1 12
Friendsville—J. O. Wood, Clark, Oldendorf & Co. 1 ..... 50
John Price, Joe S. Young, Jr. & Co. 2 ..... 30
Bob Liddle, L. F. Henneberger & Co. 1 ..... 5
J. O. Wood, Watson & Brewer 1..... 35
Ezra Bass, Healey, Lee & Co. 2 ... 25
J. W. Price, Keller & Co. 1 ..... 30
Mt. Carmel—Section 18, Mount Carmel Community Oil 1 ..... dry

Production ..... 307
Wells completed ..... 13
Dry ..... 4

**MARION COUNTY**
Centralia—Fannie Mackintosh, James Oil 2 ..... 30
A. W. Webster, Petro. Oil & Gas 7.. 30
Clark-Boley lots, Gorman-Huddleston Oil 2 ..... abd

Wells completed ..... 2
Production ..... 60
Abandoned ..... 1

**JASPER COUNTY**
Grandville—Arthur Leamon, Pure Oil 1 dry
**MORGAN COUNTY**
Jacksonville—N. E. Part Range 10, unknown 1 ..... dry
**CLARK COUNTY**
**Wells Drilling**
Parker—J. S. Phillips, Ohio Oil 28.
Westfield—W. R. Shuey, Adkins & Co. 2.
Martinsville—Harriett Slater, Mahutska Oil 4.
Casey—James Rush, W. C. McBride, Inc. 24.
Rigs, 0; wells drilling, 4; total, 4.
**CUMBERLAND COUNTY**
**Wells drilling**
Union—J. G. Paden, Campbell, Peck & Co. 3.
**CRAWFORD COUNTY**
**Wells Drilling**
Oblong—O. R. Smith, Mahutska Oil 17.
Martin—A. M. Shipman, James Pease & Co. 14.
Prairie—Amelia E. Joseph, McNally & Starr 7.
Montgomery—G. B. Ford, Walter Squires & Co. 9.
Russell—A. J. Vaught, Hartman & Co. 1.
Rigs, 0; wells drilling, 5; total, 5.
**LAWRENCE COUNTY**
**Rigs**
Dennison—Mrs. G. H. Highsmith, Frank H. Brown & Son 1.
**Wells Drilling**
Dennison—Elydia Ridgley, Ohio Oil 11.
Thos. Taylor, Treat-Hays Oil 1.
George Smith, Art Smith & Co. 1.
Petty—Wm. Ross, Silurian Oil 18.
Rigs, 1; wells drilling, 4; total, 5.
**WABASH COUNTY**
Friendsville—A. Bert Keen, Peiper & Co. 12.
Ed Hartwick, Miller & Co. 1.
**Wells Drilling**
Wabash—F. M. Leek, Clark, Oldendorf & Co. 4.
M. Madden, Mahutska Oil 4.
John Stillwell, Adams Corner Oil 1.
Mack Madden, Adams Corner Oil 7.
Holson-Dorney, Max Oil 7.
Kate Kyser, Joe S. Young Jr. & Co. 4.
John Barney, Joe S. Young Jr. & Co. 1.
Cisil heirs, Cisil Heirs Oil 3.
Jesse Cisil, Eastern Gulf Oil 2.
Kogan heirs, Mayhugh & Co. 4.
Marcotte-Ciscil, W. C. McBride, Inc. 5.
Friendsville—John Price, Joe S. Young, Jr. & Co. 3.
Rigs, 3; wells drilling, 12; total, 15.
**MARION COUNTY**
**Rigs**
Homer Adams, Ohio Oil 1.
**COLES COUNTY**
**Wells Drilling**
Charleston—Earl Thrakill, Block Oil Corp. 1.
**DOUGLASS COUNTY**
**Wells Drilling**
Sargent—W. E. Brown, Douglass Oil 1.
**JASPER COUNTY**
**Wells Drilling**
Grandville—M. Ritter, Wimsett & Co. 1.
**FAYETTE COUNTY**
**Rigs**
Fayette—John Baxter, H. McCurdy 1.
**EDWARDS COUNTY**
**Wells Drilling**
Grayville—Jas. M. Helm, Grayville Oil Synd. 1.
**RANDOLPH COUNTY**
**Wells Drilling**
Sparta—McElroy, Bill Goddard & Co. 1.
**MADISON COUNTY**
**Wells Drilling**
N. E. of Belleville—Unknown Parties 1.
**McDONOUGH COUNTY**
**Wells Drilling**
Plymouth—Colmar-Stoneking, Unknown 1.

## INDIANA FIELD

**Summary of Field Operations**

| | Comp. | Prod. | Dry | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|
| Wells | 0 | 0 | 0 | 0 | 1 | 1 |
| Jay | 2 | 20 | 1 | 0 | 2 | 2 |
| Adams | 2 | 30 | 0 | 1 | 7 | 8 |
| Huntington | 0 | 0 | 0 | 1 | 0 | 1 |
| Randolph | 0 | 0 | 0 | 1 | 0 | 1 |
| Gibson | 3 | 15 | 2 | 0 | 1 | 1 |
| Pike | 6 | 98 | 2 | 1 | 4 | 5 |
| Sullivan | 0 | 0 | 0 | 0 | 2 | 2 |
| Allen | 1 | 10 | 0 | 1 | 3 | 4 |
| Knox | 1 | 0 | 1 | 0 | 5 | 5 |
| Daviess | 1 | 30 | 0 | 0 | 2 | 2 |
| Henderson | 1 | 0 | 1 | 0 | 0 | 0 |
| Jackson | 0 | 0 | 0 | 0 | 1 | 1 |
| Shelby | 0 | 0 | 0 | 0 | 1 | 1 |
| Lagrange | 0 | 0 | 0 | 0 | 1 | 1 |
| Vigo | 0 | 0 | 0 | 0 | 1 | 1 |
| Dubois | 0 | 0 | 0 | 0 | 1 | 1 |
| Warrick | 0 | 0 | 0 | 0 | 1 | 1 |
| Total May | 17 | 203 | 7 | 5 | 33 | 38 |
| Total April | 6 | 46 | 3 | 3 | 35 | 38 |
| Difference | 11 | 157 | 4 | 2 | 2 | 0 |

**WELLS COMPLETED**
**JAY COUNTY**
Bear Creek—Irwin Campbell, M. T. Smith & Co. 2 ..... 20
Penn—S. E. Davis, Amber Oil Prod. 11 ..... dry

Wells completed ..... 2
Production ..... 20
Dry ..... 1

**ADAMS COUNTY**
Jefferson—M. J. Niblick, J. H. Harmon & Co. 6 ..... 25
J. Kinney, David Abromson 2 ..... abd
C. Duer, David Abromson 3 ..... abd
Blue Creek—G. Runyon, Schulte, Haney & Co. 3 ..... 5

Wells completed ..... 2
Production ..... 30
Abandoned ..... 2

**GIBSON COUNTY**
Washington—W. A. McRoberts, Ohio Oil 4 ..... dry
Barton—T. J. Parker, Gem Oil Corp. 2 15
White River—Lulu P. Harvey, Bell Bros. 1 ..... dry

Wells completed ..... 3
Production ..... 15
Dry ..... 2

**PIKE COUNTY**
Logan—Sarah Shoaf heirs, Andrews & Burden 2 ..... 25
Miley-Chandler, Claud Chandler & Co. 1 ..... 33
Maude Williams, Claud Chandler & Co. 1 ..... dry
W. Crecelius, United Petroleum 3 ... dry
Clay—Stewart Bros., Murphy Oil 3.. 10
Monroe—Parker-Wilson, Ohio Oil 1 ... 30
Madison—S. A. P. Barker, Bradford Supply & Ploft 1 ..... abd

Wells completed ..... 6
Production ..... 98
Dry ..... 2
Dry ..... 2
Abandoned ..... 2

**ALLEN COUNTY**
Maumee—J. H. Gerber, Schuran Oil 3.. 10
**KNOX COUNTY**
Decker—P. Steckler, Eastern Gulf Oil 1 dry
**DAVIESS COUNTY**
Veale—Gaither, Sargent, Hartman & Co. 4 ..... 30
**HENDERSON COUNTY**
Clay—W. Christy, Unknown 1 ..... dry
**WELLS COUNTY**
**Wells Drilling**
Nottingham—H. J. Heistand, Say Oil 1.
**JAY COUNTY**
**Wells Drilling**
Jefferson—Mary J. Niblick, J. H. Harmon & Co. 7.
Blue Creek——Tinkham, Geo. S. Lacknett 1.
C. Jones, Wm. King 4.
G. Runyon, Schults, Haney & Co. 4.
Monroe—Christ Stengle, R. S. Anderson 1.
Wabash—Armstrong heirs, Chicago Oil 2.
J. S. Steiner, M. B. Daugherty & Co. 3.
Rigs, 1; wells drilling, 7; total, 8.
**RANDOLPH COUNTY**
**Rigs**
Green—W. Cline, T. O. Thorp 2.
**HUNTINGTON COUNTY**
**Rigs**
Salamonie—Calvin Perdue, March Pet. 28.
**GIBSON COUNTY**
**Wells Drilling**
Barton—T. J. Parker, Gem Oil Corp. 3.
**PIKE COUNTY**
**Rigs**
Logan—E. Beck, Alex Singer 2.
**Wells Drilling**
Logan—Wm. Miley, J. Morsey & Co. 1.
Sarah Shoaf heirs, Andrews & Burden 3.
Clay—Stewart Bros., Murphy Oil 4.
Claud Loveless, Bement Oil 3.
Rigs, 1; wells drilling, 4; total, 5.
**SULLIVAN COUNTY**
**Wells Drilling**
Turman—M. J. Baird No. 2, Ohio Oil 25.
Hamilton—C. E. Gilbert, Bellman & Co. 1.
Rigs, 0; wells drilling, 2; total, 2.
**ALLEN COUNTY**
**Rigs**
Maumee—D. Helmke Waterloo Oil & Gas 3.
**Wells Drilling**
Maumee—M. Roamake, Schuran Oil 1.
J. F. Butt, Estes, Manion & Co. 1.
W. Kammyer, Estes, Manion & Co. 1.
Rigs, 1; wells drilling, 3; total, 4.
**KNOX COUNTY**
**Wells Drilling**
Decker—J. N. Ballentine, Russell Prod. 1.
Musselman, Eastern Gulf Oil 1.
Nellie M. Orr, Eastern Gulf Oil 1.
Henry Sullivan, Unknown 1.
**DAVIESS COUNTY**
**Wells Drilling**
Veale—J. E. Peek, Commercial Prod. 1.
Washington Parties 1.
Rigs, 0; wells drilling, 2; total, 2.
**JACKSON COUNTY**
**Wells Drilling**
Near Freetown—Unknown 1.
**SHELBY COUNTY**
**Wells Drilling**
Van Buren—J. Harshbarger, L. N. Nicholson 1.
**LAGRANGE COUNTY**
**Wells Drilling**
Howe—Howe Oil & Gas 1.
**VIGO COUNTY**
**Wells Drilling**
Sugar Creek—Nattkemper, Welch, Flynn & Gambill 1.
**DUBOIS COUNTY**
**Wells Drilling**
Cass—Wm. Meissner, Wheeler & Co. 1.
**WARRICK COUNTY**
**Wells Drilling**
Pidgeon—Vock & Folson, Turner Oil & Gas 1.

## KENTUCKY-TENNESSEE

**Summary of Field Operations**

| District— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Warren | 9 | 75 | 1 | 0 | 1 | 12 | 13 |
| Allen | 11 | 12 | 6 | 0 | 0 | 11 | 11 |
| Barren | 21 | 188 | 4 | 0 | 0 | 33 | 33 |
| Owensboro District | 14 | 180 | 4 | 0 | 0 | 22 | 22 |
| Cumberland-Monroe | 10 | 371 | 4 | 1 | 0 | 14 | 14 |
| Hopkins | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Simpson | 0 | 0 | 0 | 0 | 0 | 5 | 5 |
| Green | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Casey | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| Wayne | 2 | 1 | 1 | 0 | 0 | 6 | 6 |
| Lee-Owsley | 3 | 13 | 0 | 1 | 0 | 10 | 10 |
| Lawrence-Johnson | 15 | 156 | 0 | 0 | 3 | 14 | 17 |
| Johnson-Magoffin | 4 | 32 | 0 | 0 | 3 | 10 | 13 |
| Floyd | 0 | 0 | 0 | 0 | 0 | 8 | 8 |
| Knox | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Estill | 5 | 15 | 2 | 0 | 0 | 3 | 3 |
| Morgan | 3 | 15 | 0 | 0 | 0 | 9 | 9 |
| Elliott | 0 | 0 | 0 | 0 | 1 | 2 | 3 |
| Menifee | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Laurel | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Jackson | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Greenup | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Powell | 1 | 2 | 0 | 0 | 0 | 0 | 0 |
| Kentucky | 98 | 1,061 | 22 | 2 | 9 | 170 | 179 |
| Tennessee | 1 | 500 | 0 | 0 | 0 | 17 | 17 |
| Mississippi | 0 | 0 | 0 | 0 | 3 | 8 | 11 |
| Alabama | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Georgia | 4 | 0 | 4 | 0 | 0 | 0 | 0 |
| Ttl. May | 103 | 1,561 | 26 | 2 | 12 | 199 | 211 |
| Ttl. April | 100 | 1,774 | 24 | 2 | 18 | 192 | 210 |
| Difference | 3 | 213 | 2 | 0 | 6 | 7 | 1 |

**WELLS COMPLETED**
**WARREN COUNTY**
Bowling Green—Gillespie 50-a., American National Bank 10 ..... 3
C. E. Shell, Lincoln Oil Pro. 4..... 5
C. E. Shell, Lincoln Oil Prod. 5..... 5
Jas. Detridge, A. B. Hudson, Atty. 2 5
W. R. Hinton, P. H. Lavelle 8 ..... 25

Mary Ferguson, Onsel Bros. & Co. 12 2
C. G. Davenport, Onsel Bros. & Co. 6 25
Ben Ford, American Nat. Bank, 9.. dry
Chas. Cox, A. F. Bannon 23 ..... 5

Wells completed ..... 9
Production ..... 75
Dry ..... 1

**ALLEN COUNTY**

Scottsville—Lee Moore, Lee Moore 5... 4
I. H. Rickman, Citizens Oil 15..... 2
I. H. Rickman, Citizens Oil 16 ..... 2
A. A. Davenport, Fred W. Owen 10.. 3
A. A. Davenport, Fred W. Owen 11.. 2
J. F. Johnson, R. A. Stohr 8 ..... dry
Dovie Mantello, Huffman, Phillips & Co. 10 ..... dry
G. W. Pearson, West Penn Oil 12 ... dry
H. Ayres, Ziegler & Co. 1 ..... dry
C. J. Morehead, Whitney & Co. 1... dry
J. T. Johnson, Giddings & Co. 1... dry

Wells completed ..... 11
Production ..... 13
Dry ..... 6

**BARREN COUNTY**

Glasgow—Mayfield, Houchins Leasehold 10 ..... 5
Bruton, Fred C. Moore 7 ..... 5
W. E. Steffey, T. L. Gorby 2 ..... 25
Mayfield, Houchins Leasehold 11.... 5
Taylor Mansfield, Ziegler Bros. 23.. 6
White-Smith, Harrington & Norris Bros. 3 ..... 4
Richardson, Star Oil & Gas 2 ..... 30
White, R. B. Taylor 4 ..... 30
C. D. Boyd, Ziegler Bros. 2 ..... 25
Harrison, Gillespie & Wiggins 1..... dry
R. G. & K. Y. Boyd, Ziegler Bros. 1 dry
Depp-Greer, Lew J. Emery, Jr., Sons 24 ..... 8
Deep-Greer, Lew J. Emery, Jr., Sons 27 ..... 8
McGlochlin, J. W. Porter 16 ..... 5
McGlochlin, J. W. Porter, 15 ..... 6
Casaday, Hiland Oil & Gas 16..... 8
Tolin, Botts & Stambaugh 1 ..... 5
McCoy, Esslinger Oil 1 ..... dry
Clark, Esslinger Oil 1 ..... dry
Park Pitcock, Lew J. Emery Jr., Sons 1 ..... 7
Unknown, Sunby & Co. 1 ..... 6

Wells completed ..... 21
Production ..... 188
Dry ..... 4

**OWENSBORO DISTRICT**
**(Hancock-Ohio-Daviess Counties)**

Owensboro—Monroe Collier, Leeper Oil 1 ..... 10
Lon Helm, Leeper Oil 8 ..... 40
Askins, Cornell & Weatherholt 1.... dry
Laura Mercer, Penn-Indiana Oil Synd. 3 ..... 10
Swope Bros., Penn-Indiana Oil Synd. 13 ..... 5
Probst, Leeper Oil 1 ..... 25
J. J. Midkiff, White Plains Oil & Gas 3 ..... 10
Mrs. Nannie Brown, Chicago Pet. Synd. 1 ..... 35
Guenther-Gant, Chicago Pet. Synd. 4 ..... 15
Widow Crowe, C. E. Daugherty & Co. 10 ..... 15
Near Taffey, Unknown 1 ..... dry
Joe Bob Ellis, J. M. Loman, trustee 2 15
R. B. Powers, Penn-Indiana Oil Synd. 6 ..... dry

Wells completed ..... 14
Production ..... 180
Dry ..... 4

**CUMBERLAND-MONROE COUNTIES**

Kettle Creek—J. Poindexter, Young Oil 2 ..... dry
W. T. Blythe, Two Creeks Oil 1 ..... dry
Carley Scott, Hardly Able Oil1 ..... 168
Lower Kettle—Dave King, A. S. McClintock & Co. 1 ..... dry
Sulphur Creek—M. E. Coop, W. S. Raydure & Son 5 ..... 192
Owens, Oil Fork Development 1..... 12
Davis, Wilcox Bros. 2 ..... 6
W. M. Davidson, West & Thrasher 1 dry
Crocus Creek—J. H. Morgan, Baird & Hickman 1 ..... gas
Barger, Baird & Hickman 1 ..... dry

Wells completed ..... 10
Production ..... 371
Dry ..... 5
Gas ..... 1

**WAYNE COUNTY**

District 2—Coffey heirs, Bell, Bell & Co. 2 ..... 1
District 3—Kinnie Waddle & Gibson, Beaver Petroleum 4 ..... dry

Wells completed ..... 2
Production ..... 1
Dry ..... 1

**LEE-OWSLEY COUNTIES**

Idamay—Miller-Pruitt-Goff, Petroleum Exploration 13 ..... 10
W. S. Treadway, Petroleum Exploration 1 ..... gas
District 16—Hall-Baker, Superior Oil Corp. 90 ..... 3

Wells completed ..... 3
Production ..... 13
Gas ..... 1
Gas production ..... 1,700,000

**LAWRENCE-JOHNSON COUNTIES**

District 22—R. N. Sparks, Swiss Oil Corp. 8 ..... 8
C. K. Dobyne No. 2, Swiss Oil Corp. 8 ..... 10
C. K. Dobyne No. 2, Swiss Oil Corp. 9 ..... 10
District 22-A—Sanford Lyon, Swiss Oil Corp. 28 ..... 28
Sanford Lyon, Swiss Oil Corp. 29.... 20
Henry McKenzie, Swiss Oil Corp. ... 7
Martha Kelley, Swiss Oil Corp. 13.... 5
Jess Lyons, Keaton Oil & Gas 31.... 10
District 32—P. P. Holbrook, Swiss Oil Corp. 38 ..... 10
P. P. Holbrook, Swiss Oil Corp. 39.. 10
P. P. Holbrook, Swiss Oil Corp. .... 10
J. J. Gambill, Swiss Oil Corp. 41.... 10
District 33—Geo. Evans, Swiss Oil Corp. 16 ..... 8
George Evans, Swiss Oil Corp. 17 ..... 10
J. M. Fyffe, Swiss Oil Corp. 18..... 10

Wells completed ..... 15
Production ..... 156

**JOHNSON-MAGOFFIN COUNTIES**

District 29—Oscar Wheeler, Hudson & Collins 9 ..... 3
Yearns Hale, R. G. Gillespie & Co. 1. 10
Paris Long, Hope Const. & Refg. 9 4
District 31—Jess Adams No. 2 Elkhorn Coal & Model Oil 3 ..... 15

Wells completed ..... 4
Production ..... 32

**ESTILL COUNTY**

District 7—John Bill Rogers, Mt. Springs Oil 13 ..... 3
Jesse Willets, C. O. Amsler & Co. 1 dry
C. B. Howell, C. B. Howell, trustee 3 dry
District 8—Simp Horn, Superior Oil Corp. 7 ..... 8
S. M. Maple, Reno Oil 5 ..... 5

Wells completed ..... 5
Production ..... 15
Dry ..... 2

**MORGAN COUNTY**

District 30—Kelley Owens, Willson Oil 3 ..... 5
Lee Owens, Oliver Jenkins 1 ..... 5
Sam Blanton 123 a., R. G. Gillespie 19 ..... 5

Wells completed ..... 3
Production ..... 15

**POWELL COUNTY**

District 15—John A. Rogers, W. O. Dunham 4 ..... 3

**TENNESSEE**
**CLAY COUNTY**

Willow Grove, Jim Stover, A. A. Alexander & Co. 1 ..... 500

**GEORGIA**
**PULASKI COUNTY**

Hawkensville—Florida Consolidated Oil 1 ..... abd

**JEFF DAVIS COUNTY**

Hazelhurst—Mid-Georgia Oil 1 ..... dry

**TELFAIR COUNTY**

Scotland—Telfair Oil 1 ..... dry

**BURKE COUNTY**

Green Cut—Three Creeks Oil 1 ..... dry

**WARREN COUNTY**
**Rigs**

Bowling Green—Worden, C. B. Tannehill 2.
**Wells Drilling**
Bowling Green—Keller, Al. F. Haynes 1.
Covington, Blk. 7, Wm. Zimmer 10.
Manning, Gold Flash Oil 4.
J. M. Morgan, Brand & Henderson 6.
C. K. Daugherty, F. F. Blanchard & Co. 1.
N. L. Miller, Petroleum Exploration 1.
Georgianna Davenport No. 3, T. A. Sheridan 5.
Ed & Betty Bass, E. M. Treat & Co. 10.
E. G. Savage, Bull Bayou-Homer Oil 12.
Jas. Dethridge, A. B. Hudson, Atty. 3.
E. G. Savage, Zev Oil 4.
John W. Covington, Block 8, Paul Cooksey 8.
Rigs, 1; wells drilling, 12; total, 13.

**ALLEN COUNTY**
**Wells Drilling**

Scottsville—A. A. Davenport, Fred W. Owens 12, 13.
W. M. Hall, Reaher & Co. 1.
Lee Moore, Lee More 6 .
John Farley, Reaher & Co. 1.
Phoebe Oliver, Unknown 14.
Earl Oliver, M. S. Halls & Co. 2.
Lon Oliver, Cyphus & Harley 5.
S. & K. Thratton, Vic DeCaigney 7.
E. Newman, Bastrus & Co. 3.
Angel Meredith, G. W. Hahm 11.
Rigs, 0; wells drilling, 11; total, 11.

**BARREN COUNTY**
**Wells Drilling**

Emery Moore Pool—Marshall, Unknown 1.
Pitcock, Houchins Leasehold 20.
Ziegler, Houchins Leasehold 13.
Wilson, Philip Kopel, 1.
Bruton, Fred C. Moore 8.
W. E. Steffey, T. L. Gorby 3.
Hall-Baker Pool—H. W. Duff, Consolidated Gas 17.
Hutcheson, Harrington-Norris Bros. 4.
Knob Road Dist.—C. D. Boyd, Ziegler Bros. 3.
Boyd Bros., Ziegler Bros. 2.
Richardson, Star Oil & Gas 3.
Beaver Creek—Maddox heirs, Harrington & Norris Bros. 2.
Duff, Consolidated Gas 13.
Gorby Pool—Richardson, Richardson Farm Oil 4, 5.
Everette, Kopel Oil 2.
Richardson, Lew J. Emery, Jr., Sons 3.
Dickens, Lew J. Emery, Jr., Sons 3.
Jones, Lew J. Emery, Jr., Sons, 3, 4.
Whitney, Wood Oil 1.
Ralston, Samson & Bowers 1.
Carver, Ziegler Bros. 1.
Casaday, Hiland Oil & Gas 17.
McGlochlin, J. W. Porter 17.
Dearing, Hope Const. & Refg. 3.
Lecta Pool—Wialliamson, Norris Bros. 1.
Speacer, Gillespie & Wiggins 1.
Grady, Coombs & Co. 1.
C. B. Jones, Esslinger Oil 5.
Tompkinsville Road—Mattis, Baker & Co. 2.
Richardson Pool—Davidson, Houchins Leasehold 4.
Riley Scrimeger, William Christian 1.
Rigs, 0; wells drilling, 33; total, 33.

**OWENSBORO DISTRICT**
**Wells Drilling**

Owensboro—L. L. Troyder, Johnson & Engle 1.
Will Howard, Petroleum Extraction 1.
J. W. McDaniel, Petroleum Extraction 1.
Burdette, White I. Nicklin 8.
Guenther-Gant, W. F. Stevenson & Co. 1.
Laura Mercer, Penn-Indiana Oil Synd. 4, 5.
J. L. Phillips, Penn-Indiana Oil Synd. 3.
C. W. Kelley, Penn-Indiana Oil Synd. 2.
Cicero Whittinhill, Lew J. Emery, Jr., Sons 1.
W. S. Gabbard, Bert Thompson 3.
Dave King, Greasy Creek Oil 8.
R. B. Powers, 40, Leeper Oil 8.
J. A. Greer, Leeper Oil 1.
Wm. Coleman, White Plains Oil & Gas 1.
Orella Ralph, White Plains Oil & Gas 2.
Joe Bob Ellis, White Plains Oil & Gas 1.
John A. Smith, Panther Creek Oil 1.
Probst, Leeper Oil 1.
C. Roach, Tremor & Thompson 1.
J. L. Smith, Rex-Pyramid Oil 1.
Guenther-Gant, Chicago Petroleum Synd. 5.
Rigs, 0; wells drilling, 22; total, 22.

**CUMBERLAND-MONROE COUNTIES**
**Wells Drilling**

West Fork Pool—C. T. Cheatham, Alta Oil 2.
Sulphur Creek—Davidson, Wilcox Bros. 1.
J. B. Riddle, Hook & McComas 2.
A. A. Huddleston, Combest Oil Corp. 9.
A. A. Huddleston, Southern Prod. 10.
Whites Bottom—H. Flint, Martinsville Oil & Gas 1.
Judie Creek—H. Cloyd, Elbow Oil 1.
Crocus Creek—Fulton Grider, Baird & Hickman 3.
Harden Hadley, Baird & Hickman 1.
J. H. Morgan, Baird & Hickman 4.
Patterson, Phillip & Co. 1.
G. W. Brockman, Wood-Haislet, McLennon & Co. 2.
Hi. Jackson, Crawford & Webster 1.
Baier-Elliott, W. A. Haas 1.
Rigs, 0; wells drilling, 14; total, 14.

**HOPKINS COUNTY**
**Wells Drilling**

Nortonville—Holleman, Copper Flash Oil 14.

**SIMPSON COUNTY**
**Wells Drilling**

Franklin—Hogan, Small & Tully 11.
Slate, Slate Bros. 3.
John Price McMullen & Reagle 3.
Holeman, Lincoln Oil Prod. 1.
L. Wilkerson 25 a., Reagle, Clark & Co. 1.
Rigs, 0; wells drilling, 5; total, 5.

**GREEN COUNTY**
**Wells Drilling**

Greensburg—Curry, T. S. Curry 1.
Tucker, United Carbon 1.
Rigs, 0; wells drilling, 2; total, 2.

**CASEY COUNTY**
**Rigs**

Near Avon—T. B. Hammonde, Col. Less Combest 1.
**Wells Drilling**
Dunnville—Ben Russell, Irwin, Anschutz & Co. 1.
Rigs, 1; wells drilling, 1; total, 2.

**EASTERN DIVISION**
**WAYNE COUNTY**
**Wells Drilling**

Oil Valley—Dabney, Wood Oil 1.
District 2—G. Y. Davis, Vulcan Oil 17.
B. S. Huffaker, B. S. Huffaker 4.
District 5—Coffey-Oatts, Abbott, Porter & Co. 4.
District 13—Melissa Fairchilds, E. M. Taybe & Co. 2.
Nancy L. Jones heirs, W. R. Souther 1.
Rigs, 0; wells drilling, 6; total, 6.

**LEE-OWSLEY COUNTIES**
**Wells Drilling**

District 16—E. L. Rogers, Superior Oil Corp. 12.
District 18—Flahaven Land, Ohio Oil 82.
Wylie Bryant, Cook & Co. 2.
District 35—McGuire heirs, C. M. Purdy 2.
H. D. Farrish, H. B. Sipple 3.
Dave Mays, Hupp, Duff & Co. 14.
District 36.—Thos. Foreman, Rex-Pyramid Oil 1.
Thos. Foreman, Standard Oil & Ky. 1.
Baker, Watkins & Co. 1.
Unknown, Superior Oil Corp. 1.
Rigs, 0; wells drilling, 10; total, 10.

**LAWRENCE-JOHNSON COUNTIES**
**Rigs**

District 32—J. J. Skaggs, Cumberland Petroleum 4.
Robt. Fyffe, Pluto Oil 6.
District 33—Ira Lester, W. M. Stone & Co. 11.
**Wells Drilling**
Blaine—Devils Fork, W. E. Schwartz 1.
District 22—J. D. Bond, J. T. Hare & Son 3.
L. T. Sparks, Garrison & Townsend 9.
R. N. Sparks, Swiss Oil Corp. 9.
C. E. Fraley, Swiss Oil Corp. 15.
District 22-A—Herbert Skaggs, Swiss Oil Corp. 8.
Sanford Lyon, Swiss Oil Corp. 30.
C. K. Osborne, Skaggs, Miller & Co. 1.
District 32—J. J. Gambill, Swiss Oil Corp. 42
P. P. Holbrook, Swiss Oil Corp. 41, 42.
Esta Walters, Reno Oil 2.
District 33—George Evans, Swiss Oil Corp. 18.
Nora Lemaster, J. N. Meek, trustee, 4.
Rigs, 3; wells drilling, 14; total, 17.

**JOHNSON-MAGOFFIN COUNTIES**
**Rigs**

District 25—W. H. Collins, Petroleum Exploration 3.
District 27—Eliza Powers, Clyde Oil 6.
Bailey heirs, Cobb & Lucas 7.
**Wells Drilling**
District 25—Gordon Blanton, Atlantic Oil & Refg. 20.
District 27—Cholly Conley, Ky.-Indiana Oil Trust 7.
District 29.—W. H. Conley, Bed Rock Petroleum 30.
Mary Burke, R. G. Gillespie 7.
A. A. Almy, Cumberland Petroleum 7.
District 31—Coon Adams, Oliver Jenkins 1.
W. E. Patrick, Bed Rock Petroleum 5.
J. H. Arnett, Bed Rock Petroleum 22.
John M. Adams, Elkhorn Coal Corp. 2.
H. H. May, Short Fork Oil 8.
Rigs, 3; wells drilling, 10; total, 13.

**FLOYD COUNTY**
**Wells Drilling**

District 21—Mouse Martin, Ohio Fuel Oil 3.
Elkhorn Coal Corp., Ohio Fuel Oil 5.
Mary Martin, Louisville Gas & Elec. 3.
T. Martin, Louisville Gas & Elec. 4.
T. Allen, New Domain Oil & Gas 5.
Jack Turner heirs, Eastern Carbon Black 3.
T. G. Martin, Midas Oil 4.
Joe Hall, Hope Const. & Refg. 1.
Rigs, 0; wells drilling, 8; total, 8.

**KNOX COUNTY**
**Wells Drilling**

Barbourville—Dizney, Dizney & McKee 1.
Red Bird Creek, Beattyville Parties 1.
Rigs, 0; wells drilling, 2; total, 2.

**ESTILL COUNTY**
**Wells Drilling**

District 7—D. N. Witt, R. Denton & Co. 11.
John Bill Rogers, Mt. Springs Oil 14.
District 8—S. M. Maple, Reno Oil 6.
Rigs, 0; wells drilling, 3; total, 3.

**MORGAN COUNTY**
**Wells Drilling**

West Liberty—Pleasant Run, Jim Patton 1.
Blair Mills, Colier & Co. 1.
District 30—Willie Blanton, Conley Bros. 2.
Jesse Cole, The Eagle Oil 3.
Kelley Owens, Willson Oil 4.
Lee Owens, Oliver Jenkins 2.
Sam Blanton, R. G. Gillespie 20.
District 6—Lenox Sawmill Co., W. B. Sandifer, trustee 1.
T. J. Elam, Popping Creek Oil 1.
Rigs, 0; wells drilling, 9; total, 9.

**ELLIOTT COUNTY**
**Rigs**

District 34—D. A. Lewis, Smith & Garrison 2.
**Wells Drilling**
District 34—John Dials, Edra Lee Oil & Gas 5.
Lincoln Creek—Joe Wagner, J. M. McDonald 1.
Rigs, 1; wells drilling, 2; total, 3.

**MENIFEE COUNTY**
**Wells Drilling**

Leatherwood—Widow Reed, McKinney Bros. 1.
Hamp Rawlins, W. O. Bach 3.
Rigs, 0; wells drilling, 2; total 2.

**LAUREL COUNTY**
**Wells Drilling**

London—10 S. W. London, Standard Oil of Ky. 1.

**JACKSON COUNTY**
**Wells Drilling**

McKee, Isaac, Standard Oil of Ky. 1.

**GREENUP COUNTY**
**Wells Drilling**

Greenup—J. H. Flannery, Petroleum Exploration 1.

**TENNESSEE**
**CLAY COUNTY**
**Wells Drilling**

Clark Pool—J. M. Gray, H. Z. Clark & Co. 2.
A. T. Davis, Dixon, Bayless & Douglass 3.
Celina—Lanford, Miller Bros. 1.
George Plumley, John B. Kerr 1.
George Tinsley, Lewis & George 1.
Turkey Creek—Potter, Mendenthall Bros. 1.
Pea Ridge—Kerr, Foster Mitchell 1.
Willow Grove—Widow Hargrave, Carnahan & Horn 1.
Jim Stover, A. A. Alexander & Co. 2.
Lower Kettle Creek—Riley Kerr, Mitchel & Co. 1.
Tinsley Bottom—Hamp Lynn, Dafoe & Co. 9.
Rigs, 0; wells drilling, 11; total, 11.

**MORGAN COUNTY**
**Wells Drilling**

Sunbright—Somers, Cockrel & Co. 1.
Glades, Knoxville Parties 2.
Fee, Russell Producing Co. 7.
Rigs, 0; wells drilling, 3; total, 3.

**OVERTON COUNTY**
**Wells Drilling**

Livingstone—Windle, Duncan & Co. 1.
Monroe Anticline—A. H. Heisey Co. & John Elder 1.
Copeland Cove Anticline—H. R. Guard 1.
Rigs, 0; wells drilling, 3; total, 3.

**MISSISSIPPI**
**FRANKLIN COUNTY**
**Rigs**

Jackson—Pear River, New York Parties 1.

**COPIAH COUNTY**
**Rigs**

Hazelhurst—Brandywine, B. W. White 1.

**HOLMES COUNTY**
**Rigs**

Coxburg—Section 18-13-1, Freeun Oil 1.

**CLAIBORNE COUNTY**
**Wells Drilling**

Port Gibson—Section 5-11-2, Young, Mississippi Exploration 1.
West Side, Michael Zink 1.
Rigs, 0; wells drilling, 2; total, 2.

**YAZOO COUNTY**
**Wells Drilling**

Eden—Section 25-13-1w, Reed, Willis & Burns 1.

**HINDS COUNTY**
**Wells Drilling**

Jackson—Reeder, Johnson Oil 1.

**WASHINGTON COUNTY**
**Wells Drilling**

Glen Allen—Section 30-14-9, Williams Alhambra Oil 1.

**TISHIMINGO COUNTY**
**Wells Drilling**

Iuka—Unknown 1.

**TALLAHATCHIE COUNTY**
**Wells Drilling**

Section 23-25-2—Harvey, Shreveport Parties 1.

**MARSHALL COUNTY**
**Wells Drilling**

Section 3-32-3—Hoffman, Tom B. Slick 2.

**ALABAMA**
**MORGAN COUNTY**
**Wells Drilling**

Section 6-6-4—English, Albany-Decatur Oil 1.

**HALE COUNTY**
**Wells Drilling**

Greensburg—Hale Oil 1.

**SHELBY COUNTY**
**Wells Drilling**

Chelsea—Scott, Cooksey Oil 1.

**WILCOX COUNTY**

Selma—Blue Belle Oil 1.

**Northern Oil Information Bureau**
**Shelby, Montana**

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# WHAT AND WHERE TO BUY

## A Classified Index of Advertisers in This Publication

For Alphabetical Index See Page 33

### A

**Absorption Plant Equipment—**
American Radiator Co.
Braun, C. F., & Co.
Campbell, J. A.
Cooper, C. & G., Co.
Griscom-Russell Co.
National Gas Products Co.
Newton Process Mfg. Co.
Ross Heater & Mfg. Co., Inc.
Southwestern Engineering Co., Inc.
Southwestern Engineering Corp.

**Absorption Towers—**
Hope Engineering & Supply Co.
National Gas Products Co.
Newton Process Mfg. Co.

**Acetylene Apparatus—**
Oxweld Acetylene Co.

**Acetylene—Dissolved—**
Pest-O-Lite Co., Inc.

**Acetylene in Cylinders—**
Pest-O-Lite Co., Inc.

**Agitators—**
Chicago Bridge & Iron Works.
Kaw Steel Construction Co.
Petroleum Iron Works Co.

**Alloy Steel (See Steel—Alloy)—**

**All-Steel Drilling Rigs (See Rigs)**

**Aluminum Bronze Powder for Paint—**
Aluminum Co. of America.

**Ammonia—**
Mathieson Alkali Works, Inc.

**Anchor Clamps (See Clamps)—**

**Antimonial Leads—**
Eagle Picher Lead Co.

**Apparatus—Electric—**
Westinghouse Electric & Mfg. Co.

**Apparatus—Motor Control—**
Westinghouse Electric & Mfg. Co.

**Appraisers—**
American Appraisal Co.

**Arches—Flat Suspended—**
Brady Conveyor Corp.

### B

**Babbitts—**
Eagle-Picher Lead Co.
Ryerson, Jos. T., & Sons., Inc.

**Back Up Tongs (See Tongs)—**

**Bailers—**
Oil Well Supply Co.
Spang & Co.

**Balls and Seats—**
Axelson Machine Co.
Hough, Charles N., Mfg. Co.
Norris Brothers, Inc.
Northrup Equipment Co.

**Balls—Bronze—**
Atlas Ball Co.
Hoover Steel Ball Co.

**Balls—Steel—**
Atlas Ball Co.
Hoover Steel Ball Co.
Strom Steel Ball Co.

**Band Wheels—Steel—**
International Derrick & Equipment Co.
Marion Mch., Fdy. & Supply Co.
Moore, Lee C., & Co., Inc.
Parkersburg Rig & Reel Co.

**Barrels—**
Petroleum Iron Works Co.

**Batteries—**
National Carbon Co.

**Bearings—Roller—**
American Roller Bearing Co.
Timken Roller Bearing Co.

**Bearings—Thrust—**
Timken Roller Bearing Co.

**Belting—**
Bridgeport Machine Co.
Continental Supply Co.
Fenwick-Reddaway Mfg. Co.
Frick-Reid Supply Co.
Imperial Belting Co.
International Supply Co.
Murray Rubber Co.
Stanley Belting Corp.
Victor Balata & Textile Belting Co.

**Belting—Rubber—**
Bovaird Supply Co.
Goodyear Tire & Rubber Co.
United States Rubber Co.

**Bits—Disc—**
U. S. Tool Co.

**Bits—Fish Tail—**
Federal Supply Co.
Lucey Mfg. Corp.

**Bits—Rotary Disc—**
Hughes Tool Co.

**Bits Rotary Rock—**
Hughes Tool Co.
Reed Roller Bit Co.

**Bit Steel (See Steel—Bit)—**

**Bleaching Powder—**
Mathieson Alkali Works, Inc.

**Blow-off Valves (See Valves)—**

**Blowout Preventer—**
Regan Forge & Engineering Co.
Stearns-Roger Mfg. Co.

**Blowpipes—**
Oxweld Acetylene Co.

**Boiler Feed Pumps (See Pumps)**

**Boilers—Horizontal Return Tubular—**
Brownell Co., The
Kewanee Boiler Co.
Vogt, Henry, Machine Co.

**Boilers—Oil County—**
Bovaird & Seyfang Mfg. Co.
Bridgeport Machine Co.
Brownell Co., The
Coatesville Boiler Works.
Continental Supply Co.
Donovan Boiler Works.
Frick-Reid Supply.
International Supply Co.
Kewanee Boiler Co.
Lucey Mfg. Co.
National Supply Co.
Oil Well Supply Co.
Pattin Bros Co.
Republic Supply Co.
Titusville Iron Works.

**Bolted Tanks (See Tanks)—**

**Bolts and Nuts—**
Sheffield Steel Corp.

**Bolt Threading Machines—**
Landis Machine Co.

**Bottles—Glass—**
Illinois Glass Co.

**Box and Pin Steel—**
Andrews Steel Co.
Heppenstall Forge & Knife Co.

**Braces—Tool—**
Dunn Mfg. Co.

**Briquetting Machines—**
Simplex Equipment Co.

**Bronze Valves (See Valves—Brass and Bronze)—**

**Buildings—Metals, Sectional (All Types)—**
Austin Co.
Blaw-Knox Co.
Braden Co.
Butler Mfg. Co.
International Derrick & Equipment Co.
Marion Mch., Fdy. & Supply Co.
Truscon Steel Co.

**Bulk Station Tanks (See Tanks)**

**Bull Ropes—**
Ajax Rope Co., Inc.
Columbian Rope Co.
Plymouth Cordage Co.
Wall Rope Works, Inc.

**Bull Wheels—Steel—**
International Derrick & Equipment Co.
Marion Mch., Fdy. & Supply Co.
Moore, Lee C., & Co., Inc.
Parkersburg Rig & Reel Co.

**Burners—Gas—**
Eureka Burner Co.
Okmulgee Boiler & Welding Works.

**Burners—Oil—**
Continental Supply Co.
Reid, Joseph, Gas Engine Co.

**Bushings—Rotary Drive—**
Wilson Oil Tools Corp.

### C

**Cable Bit Steel—**
Andrews Steel Co.
Federal Supply Co.
Heppenstall Forge & Knife Co.

**Cables—Drilling, Manila—**
Ajax Rope Co., Inc.
Columbian Rope Co.
Continental Supply Co.
Frick-Reid Supply Co.
Plymouth Cordage Co.
Wall Rope Works, Inc.

**Cables—Steel—**
Ajax Rope Co., Inc.
American Cable Co.
Black Steel & Wire Co.
Broderick & Bascom Rope Co.
Continental Supply Co.
Frick-Reid Supply Co.
Hazard Mfg. Co.
Leschen, A. & Sons Rope Co.
Murray Tool & Supply Co.
National Supply Co.
Republic Supply Co.
Wickwire-Spencer Steel Corp.
Williamsport Wire Rope Co.

**Calf Rope—**
Ajax Rope Co., Inc.

**Calf Wheels—Steel—**
International Derrick & Equipment Co.
Moore, Lee C., & Co., Inc.

**Cannon—Oil Field—**
Braden Co.

**Cans—Water—**
Gott, H. P., Mfg. Co.

**Capping Steel—**
Andrews Steel Co.

**Carbon—Black Diamond—**
Diamond Drill Carbon Co.
Patrick, R. S.

**Cars—Tank—**
American Car & Foundry Co.
General American Tank Car Corp.
Shippers' Car Line, Inc.

**Cars—Tank, Leased—**
American Car & Foundry Co.
North American Car Co.
Shippers' Car Line, Inc.

**Casing—**
Bovaird Supply Co.
Central Tube Co.
Continental Supply Co.
Emsco Derrick & Equip. Co.
Jarecki Mfg. Co.
National Supply Co.
National Tube Co.
South Chester Tube Co.
Spang, Chalfant & Co., Inc.
Superior Tube Co.
Wheeling Steel Corp.

**Casing—Wrought Iron—**
Byers, A. M., Co.
South Chester Tube Co.

**Casing Elevators (See Elevators, Casing and Tubing)—**

**Casing Heads—**
Arbon, Paul, & Co.
Dresser, S. R., Mfg. Co.
Kansas City Hay Press Co.
Oil Well Improvements Co.

**Casing Lines—**
Ajax Rope Co., Inc.

**Casing Packers (See Packers)—**

**Casing Pulleys (See Pulleys)—**

**Casing Shoes—**
Baker Casing Shoe Co.
Bartlesville Supply Co.
Bridgeport Machine Co.
Guiberson Corp.
Oil Well Supply Co.

**Casings Tongs (See Tongs)—**

**Castings—Alloy Steel—**
Ohio Steel Foundry Co.
Sivyer Steel Casting Co.

**Castings—Brass—**
Progressive Brass Mfg. Co.

**Castings—Chrome Nickel Steel—**
Sivyer Steel Casting Co.

**Castings—Corrosion Resisting Non Ferrous—**
Hills-McCanna Co.

**Castings—Electric Steel—**
Ohio Steel Foundry Co.
Sivyer Steel Casting Co.

**Castings—Grey Iron—**
Ajax Iron Works.
American Car & Foundry Co.
Gaso Pump & Burner Mfg. Co.
Pittsburgh Boiler & Machine Co.

**Castings—Steel—**
Ajax Iron Works
Chicago Steel Foundry Co.
Ohio Steel Foundry Co.
Sivyer Steel Casting Co.

**Cement—Fire and High Temperature—**
Botfield Refractories Co.

**Centrifugal Pumps (See Pumps)**

**Chain Pipe Tongs (See Tongs) —**

**Chains—Conveying—**
Chain Belt Co.
Link-Belt Co.

**Chains—Oil Well—**
Baldwin Chain & Mfg. Co.
Chain Belt Co.
Link-Belt Co.

**Chains—Power Transmission—**
Baldwin Chain & Mfg. Co.
Chain Belt Co.
Link-Belt Co.

**Check Valves (See Valves)—**

**Chemical Treatment Crude Oil Emulsion—**
Barnickel, Wm. S., & Co.

**Chlorine—Liquid—**
Mathieson Alkali Works, Inc.

**Chrome Nickel Steel Castings (See Castings)—**

**Circulating Heads—**
Wilson Oil Tools Corp.

**Clamps—Anchor—**
Bartlesville Supply Co.

**Clamps—Belt—**
Federal Supply Co.
Victor Balata & Textile Belting Co.

**Clamps—Collar Leak—**
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.

**Clamps—Drilling—**
Western Supply Co.

**Clamps—Hoisting—**
Newton Process Mfg. Co.

**Clamps—Pipe—**
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.

**Clamps—River—**
Dresser, S. R., Mfg. Co.
Gaso Pump & Burner Mfg. Co.

**Cloths—Wiping—**
Nye Tool & Machine Works.

**Clutches—Friction, Plate Type—**
Twin Disc Clutch Co.

**Cocks—Brass & Iron—**
Lunkenheimer Co.
Walworth Co.

**Cocks—Plug—**
Homestead Valve Mfg. Co.

**Cocks—Water Gauge—**
Shaffer, J. E., Co.
Smith Separator Co.

**Coils and Bends—Pipe—**
Harrisburg Pipe & Pipe Bending Co.
Midwest Piping Supply Co.

**Collar Leak Clamps—(See Clamps)**

**Compounds—Boiler—**
Dearborn Chemical Co.

**Compounds—Joint Sealing —**
Key Boiler Equipment Co.

**Compressed Air Process—**
Air Cleaning & Reaming Corp.

**Compressor Cylinders (See Cylinders—Compressor)—**

**Compressors—Air—**
Bessemer Gas Engine Co.
Clark Brothers Co.
Cooper, C. & G., Co.
Gardner Governor Co.
Ingersoll-Rand Co.
Sullivan Machinery Co.

**Compressors—Ammonia—**
Carbondale Machine Co.
Cooper, C. & G., Co.

**Compressors—Direct Connected Motor and Gas Engine Driven**
Buffalo Gasolene Motor Co.
Clark Brothers Co.
Cooper, C. & G., Co.
Miller Improved Gas Engine Co.

**Compressors—Direct Driven Air and Gas—**
Bessemer Gas Engine Co.
Miller Improved Gas Engine Co.

**Compressors—Gas—**
Bessemer Gas Engine Co.
Chicago Pneumatic Tool Co.
Clark Brothers Co.
Cooper, C. & G., Co.
Hope Engineering & Supply Co.
Ingersoll-Rand Co.
National Transit Pump & Machine Co.
Worthington Pump & Machinery Corp.

**Condenser Boxes—**
Kaw Steel Construction Co.
Petroleum Iron Works Co.

**Condensers—**
American Radiator Co.
Chicago Pneumatic Tool Co.
National Gas Products Co.
Ross Heater & Mfg. Co.
Southwestern Engineering Co., Inc.
Southwestern Engineering Corp.

**Controllers—Liquid Level—**
Fisher Governor Co., Inc.
Newton Process Mfg. Co.
Smith Separator Co.

**Controllers—Pressure—**
Smith Separator Co.

**Controllers—Temperature—**
Brown Instrument Co.
Foxboro Co., Inc.
Taylor Instrument Co.

**Conveying & Elevator Machinery—**
Brady Conveyors Corp.

**Conveyors—Bucket and Belt—**
Brady Conveyors Corp.

**Conveyors—Pneumatic—**
Brady Conveyors Corp.

**Conveyors—Portable Belt—**
Barber-Greene Co.

**Cooling Towers—Atmospheric—**
Braun, C. F., & Co.
National Gas Products Co.

**Cordage—**
Bridgeport Machine Co.
International Supply Co.
Plymouth Cordage Co.

**Core Drilling—**
Longyear, E. J., Co.
Mineral Exploration Co.

**Core Drills—**
Elliott Core Drilling Co.

**Core Drills—Diamond—**
Longyear, E. J., Co.
Sullivan Machinery Co.

**Coring Tools—**
Reed Roller Bit Co.
Wilson Oil Tools Corp.

**Couplings—Flexible—**
Nuttall, R. D., & Co.
Victaulic Co. of America.

**Couplings—Plain End Pipe—**
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.

**Couplings—Seamless Steel—**
Harrisburg Pipe & Pipe Bending Co.
Superior Tube Co.

**Couplings—Steel for Casing, Line Pipe, Drill Pipe and Tubing—**
Dayton Pipe Coupling Co.
Smith, A. O., Corp.

**Cracking Processes—**
Graver Corp.
Kellogg, M. W., Co.
Universal Oil Products Co.

**Crawler Treads—**
Belle City Mfg. Co.
Full Crawler Co.

**Crown Blocks—**
International Derrick & Equipment Co.
Lucey Mfg. Corp.
Moore, Lee C., & Co., Inc.
Parkersburg Rig & Reel Co.

**Cups—Composition—**
Williamsport Development Co.

**Cups—Leather—**
Auer, C. A.

**Cutters—Pipe—**
Border Co.
Nye Tool & Machine Works.
Trimont Mfg. Co.

**Cylinders—Compressor—**
Hope Engineering & Supply Co.

**Cylinder Stocks—**
Barnsdall Refining Co.
Pure Oil Co.
Texas Company, The

### D

**Dehydrating Process—**
Barnickel, Wm. S., & Co.

**Dephlegmators—**
National Gas Products Co.
Newton Process Mfg. Co.
Smith, A. O., Corp.

**Depletion Reports—**
American Appraisal Co.

**Derricks—Steel—**
Emsco Derrick & Equip. Co.
International Derrick & Equipment Co.
Marion Mch., Fdy. & Supply Co.
Moore, Lee C., & Co., Inc.
O'Brien Steel Construction Co.
Parkersburg Rig & Reel Co.
Superior Tube Co.

**Derricks—Turnbuckle—**
National Turnbuckle Derrick Co.

**Diamonds for Core Drilling (See Carbon—Black Diamond)—**

**Die Heads—Bolt Threading—**
Bignall & Keeler Machine Works.
Landis Machine Co.

**Die Heads—Stationary Pipe Threading—**
Bignall & Keeler Machine Works.
Cox & Sons Co., The
Landis Machine Co.

**Diesel Engines (See Engines)—**

**Dies—Pipe Threading—**
Bignall & Keeler Machine Works.
Cox & Sons Co., The
Landis Machine Co.
Nye Tool & Machine Works.

**Differential Pressure Recorders (See Recorders)—**

**Direct Driven Pumps (See Pumps)**

**Disc Bits (See Bits—Disc)—**

**Dissolved Acetylene (See Acetylene)—**

**Ditchers—Pipe Line—**
Barber-Greene Co.
Buckeye Traction Ditcher Co.

**Draw Works—**
Lucey Mfg. Corp.
National Supply Co.
Titusville Iron Works Co.

**Drillers Hose (See Hose)—**

**Drilling and Fishing Tools—**
Acme Fishing Tool Co.
Baash-Ross Tool Co.
Bovaird & Seyfang Mfg. Co.
Bovaird Supply Co.
Bridgeport Machine Co.
Brown Tool Co., Inc.
Burns Tool Co.
Continental Supply Co.
Cushing, Tim, Tool & Supply Co.
Emsco Derrick & Equip Co.
General Oil Tools Co.
Hinderliter Tool Co.
Hughes Tool Co.
International Supply Co.
Larkin & Co.
Leidecker Tool Co.
Lucey Mfg. Corp.
Murray Tool & Supply Co.
Oil Well Supply Co.
Reed Roller Bit Co.
Regan Forge & Engineering Co.
Spang & Co.
Star Drilling Machine Co.
U. S. Tool Co.

**Drilling Engines (See Engines)—**

**Drilling Equipment—**
Clark Brothers Co.
Hughes Tool Co.
O'Brien Steel Construction Co.
Oil Well Supply Co.
Parkersburg Rig & Reel Co.
Reed Roller Bit Co.
Star Drilling Machine Co.

**Drilling Machines—**
Leidecker Tool Co.
Oil Well Supply Co.
Star Drilling Machine Co.

**Drilling Tools (See Drilling and Fishing Tools)—**

**Drilling Valves (See Valves)—**

**Drills—Portable Air—**
Chicago Pneumatic Tool Co.

**Drive Shoes—**
Bartlesville Supply Co.
Larkin & Co.

**Drop-Forged Wrenches (See Wrenches)—**

**Drops and Seats—**
Norris Brothers, Inc.

**Drums (See Barrels)—**

**Dynamos—**
Westinghouse Electric & Mfg. Co.

### E

**Electrical Equipment—**
Fairbanks-Morse & Co.
Pyle National Co.
Wico Electric Co.

**Electrical Apparatus (See Apparatus—Electric)—**

**Electric Drilling Equipment—**
Lucey Mfg. Corp.
Westinghouse Electric & Mfg. Co.

**Electric Steel Castings—See Castings—Electric Steel)—**

**Elevators—Casing and Tubing—**
Bovaird Supply Co.
Bridgeport Machine Co.
Dunn Mfg. Co.
Lucey Mfg. Corp.
Oil Well Supply Co.
Wilson Oil Tools Corp.

**Elevators—Rod—**
B. & A. Specialty Co.
D & B Pump & Supply Co.
Dunn Mfg. Co.

**Enamels—**
Arco Company, The
Detroit Graphite Co.
Sherwin-Williams Co.

**Engineers—Consulting and Contracting—**
Brooks Engineering Corp.
Hope Engineering & Supply Co.
Kellogg, M. W., Co.
McKee, Arthur G., & Co.
National Petroleum Engineering Corp.
Power Specialty Co.
Westcott & Greis.
Widdell Engineering Co.

**Engineers—Fire Protection—**
Brooks Engineering Corp.
Foamite-Childs Corp.

**Engineers—Oil Buildings—**
Austin Co.
International Derrick & Equipment Co.

**Engineers—Oil Treating—**
Barnickel, Wm. S., & Co.
National Gas Products Co.

**Engines—Crude Oil—**
Continental Supply Co.
Western Machinery Co.

**Engines—Diesel—**
Bessemer Gas Engine Co.
Busch-Sulzer Bros. Diesel Engine Co.
Foos Gas Engine Co.
McIntosh & Seymour Corp.
Western Machinery Co.
Worthington Pump & Machinery Corp.

**Engines Drilling—**
Ajax Iron Works
Beaver Manufacturing Co.
Bessemer Gas Engine Co.
Bovaird & Seyfang Mfg. Co.
Brownell Co., The
Buda Co.
Buffalo Gasolene Motor Co.
Clark Bros. Co.
Climax Engineering Co.
Franklin Valveless Engine Co.
Hercules Motor Corp.
Pattin Bros. Co.
Power Mfg. Co.
Republic Supply Co.
Titusville Iron Works Co.

**Engines—Gas—**
Beaver Manufacturing Co.
Bessemer Gas Engine Co.
Bruce-MacBeth Engine Co.
Buda Co.
Buffalo Gasolene Motor Co.
Chicago Pneumatic Tool Co.
Clark Brothers Co.
Climax Engineering Co.
Continental Supply Co.
Cooper, C. & G., Co.
Emsco Derrick & Equipment Co.
Foos Gas Engine Co.
Franklin Valveless Engine Co.
Frick-Reid Supply Co.
Hope Engineering & Supply Co.
Ingersoll-Rand Co.
International Supply Co.
Jones, S. M., Co.
Marion Mch. Fdy. & Supply Co.
Miller Improved Gas Engine Co.
National Supply Co.
National Transit Pump & Machine Co.
Oil Well Supply Co.
Pattin Bros. Co.
Reid, Joseph, Gas Engine Co.
Titusville Iron Works Co.
Waukesha Motor Co.
Western Machinery Co.

**Engines—Gasoline—**
Beaver Manufacturing Co.
Buda Co.
Buffalo Gasolene Motor Co.
Continental Motors Corp.
Fairbanks-Morse & Co.
Hercules Motor Corp.
International Harvester Co. of America.
Novo Engine Co.
Waukesha Motor Co.
Western Machinery Co.

**Engines—Oil—**
Bessemer Gas Engine Co.
De La Vergne Machine Co.
Fairbanks-Morse & Co.
Franklin Valveless Engine Co.
International Harvester Co. of America.
Ingersoll-Rand Co.
McIntosh & Seymour Corp.
National Supply Co.
Oil Well Supply Co.
Power Mfg. Co.
Reid,Joseph, Gas Engine Co.
Western Machinery Co.

**Engines—Semi-Diesel, Oil—**
Chicago Pneumatic Tool Co.

**Engines—Steam—**
Ajax Iron Works.
Frick-Reid Supply Co.
Lucey Mfg. Corp.
National Supply Co.
Oil Well Supply Co.

**Evaporators—**
Newton Process Mfg. Co.
Ross Heater & Mfg. Co., Inc.

**Extinguishers—Fire—**
Foamite-Childs Corp.

## F

**Fabricators for Gasoline Plants and Refineries—**
National Gas Products Co.
Stearns-Rogers Mfg. Co.

**Filters—Oil—**
Burt Mfg. Co.

**Fishing Tools (See Drilling and Fishing Tools)—**

**Fittings—Dropped Forged Steel—**
Vogt, Henry, Machine Co.

**Fittings—Forged Steel—**
Central Forging Co.

**Fittings—Malleable & Cast Iron—**
Bovaird Supply Co.
Crane Co.
Frick-Reid Supply Co.
Welworth Co.

**Fittings—Pipe—**
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.
Gaso Pump & Burner Mfg. Co.
Jarecki Mfg. Co.
Kellogg, M. W., Co.
Kennedy Valve Mfg. Co.
Metric Metal Works.
Oil Well Supply Co.
Reading Steel Casting Co.
Republic Supply Co.
United Iron Works, Inc.
Victaulic Co. of America.

**Fittings—Steel—**
Dayton Pipe Coupling Co.
Kerotest Mfg. Co.
Ohio Steel Foundry Co.

**Flanges—Brass, Iron and Steel—**
Jefferson Union Co.
Metric Metal Works.

**Flange Unions—**
Gaso Pump & Burner Mfg. Co.

**Flashlights—**
National Carbon Co.

**Floating Roofs and Decks—**
Chicago Bridge & Iron Works.

**Floodlights—**
Pyle-National Co.

**Forging Billets—**
Andrews Steel Co.
Harrisburg Pipe & Pipe Bending Co.
Heppenstall Forge & Knife Co.

**Forgings—**
Champion Machine & Forging Co.

**Friction Clutch Pulleys (See Pulleys)—**

**Fuel Oil (See Oil —Fuel)—**

**Fuller's Earth—**
Sinclair Refining Co.

## G

**Gas Compressors (See Compressors—Gas)—**

**Gas Engines (See Engines—Gas)**

**Gas Holders—**
Chicago Bridge & Iron Works.

**Gaskets—**
Garlock Packing Co.
McCord Radiator & Mfg. Co.

**Gaskets—Fibre—**
Durabla Mfg. Co.

**Gas Masks & Safety Appliances—**
Mine Safety Appliance Co.

**Gas Meters (See Meters)—**

**Gas Oil (See Oil—Gas)—**

**Gasoline—**
Berry's, James B., Sons Co.
Crown Central Petroleum Co.
Empire Refineries, Inc.
Gulf Refining Co.
Magnolia Petroleum Co.
Pure Oil Co.
Sinclair Refining Co.
Skelly Oil Co.

**Gasoline—Natural—**
Chestnut & Smith Corp.
National Gas Products Co.
Skelly Oil Co.
Warren Petroleum Co.

**Gasoline Plant Equipment—**
Bessemer Gas Engine Co.
Clark Brothers Co.
Kellogg, M. W., Co.
McKee, Arthur G., & Co.
National Gas Products Co.
Newton Process Mfg. Co.
Ross Heater & Mfg. Co., Inc.
Widdell Engineering Co

**Gas Regulator Casinghead—**
Davis, G. M., Regulator Co.
National Gas Products Co.

**Gas Scrubbers—**
National Gas Products Co.
Newton Process Mfg. Co.

**Gauge Glass—High Pressure—**
Durabla Mfg. Co.

**Gauge Poles—**
Marsh Gauge Pole Co.

**Gauges—Automatic Tank—**
Brooks Engineering Co.

**Gauges—Pressure and Vacuum—**
Bristol Co.
Equitable Meter & Mfg. Co.
Metric Metal Works.

**Gauges—Test—**
Equitable Meter & Mfg. Co.
Metric Metal Works.

**Gear Driven Pumps (See Pumps)**

**Gears—Cut—**
Nuttall, R. D., & Co.

**Gears—Reduction—**
Emsco Derrick & Equipment Co.
Nuttall, R. D., & Co.

**Gears—Reverse—**
Emsco Derrick & Equipment Co.

**Generators—**
Westinghouse Electric & Mfg. Co.

**Generators—Acetylene—**
Oxweld Acetylene Co.

**Generators—Turbine—**
Moon Manufacturing Co.
Pyle-National Co.
Westinghouse Electric & Mfg. Co.

**Glassware—Chemical for Laboratory Use—**
Illinois Glass Co.

**Governors—**
Equitable Meter & Mfg. Co.
Gardner Governor Co.

**Governors—Boiler Feed—**
Chaplin-Fulton Mfg. Co.
Fisher Governor Co.

**Grey Iron Castings (See Castings)**

## H

**Hammers—Chipping and Caulking Pneumatic—**
Chicago Pneumatic Tool Co.

**Hammers—Riveting Pneumatic—**
Chicago Pneumatic Tool Co.

**Hangers—Iron and Steel—**
Continental Supply Co.
Dodge Mfg. Corp.

**Hangers—Tubing—**
Hercules Tool Co.

**Hatches—Gauges and Thief—**
Oil Conservation Engineering Co.

**Heat Exchangers—**
Carbondale Machine Co.
Griscom-Russell Co.
Hope Engineering & Supply Co.
National Gas Products Co.
Newton Process Mfg. Co.
Ross Heater & Mfg. Co.
Southwestern Engineering Co., Inc.
Southwestern Engineering Corp.

**Heat Exchangers—Fluid—**
Braun, C. F., & Co.
Ross Heater & Mfg. Co., Inc.

**High Pressure Gate Valves (See Valves)—**

**Hoists—Pneumatic, Geared and Universal—**
Chisholm-Moore Mfg. Co.
Yale & Towne Mfg. Co.

**Hoists—Portable—**
Chisholm-Moore Mfg. Co.
Ford Chain Block Co.
Sullivan Machinery Co.
Wright Mfg. Co.
Yale & Towne Mfg. Co.

**Hooks for Rods and Tubing—**
B. & A. Specialty Co.
Dunn Mfg. Co.

**Hose—**
Fenwick-Reddaway Mfg. Co.

**Hose—Drillers—**
Goodrich, B. F., Rubber Co.
United States Rubber Co

**Hose—Oil Suction and Discharge**
Goodrich, B. F., Rubber Co.
United States Rubber Co.

**Hose—Rubber—**
Goodyear Tire & Rubber Co.
United States Rubber Co.

**Hot Rolled Strip Steel (See Steel)**

**Hydraulic Jacks (See Jacks)—**

**Hypochlorite of Lime—**
Mathieson Alkali Works, Inc.

## I

**Injectors—**
Penberthy Injector Co.

**Insulation Materials—**
Celite Products Co.
Johns-Manville, Inc.

**Insurance—Fire—**
Oil Insurance Association

**Insurance—Tornado—**
Oil Insurance Association.

**Iron—Ingot—**
American Rolling Mill Co.

## J

**Jacks—Hydraulic—**
Bridgeport Machine Co.

**Jacks—Lifting—**
Templeton, Kenly & Co., Ltd.

**Jacks—Pumping—**
American Mfg. Co. of Texas.
American Wells Works.
Bessemer Gas Engine Co.
Braden Co.
Frick-Reid Supply Co.
Jones, S. M., Co.
Kansas City Hay Press Co.
Norris, W. C.
Spang & Co.

**Jars—**
Arbon, Paul, & Co.
Bridgeport Machine Co.
Spang & Co.

**Jar Steel—**
Andrews Steel Co.
Heppenstall Forge & Knife Co.

## K

**Kerosene—**
Empire Refineries, Inc.
Gulf Refining Co.
Magnolia Petroleum Co.
Pure Oil Co.

## L

**Lacquers—**
Arco Company, The
Sherwin-Williams Co.

**Lanterns—Electric—**
Delta Electric Co.

**Lead and Mixed Metal Products—**
Eagle-Picher Lead Co.

**Lead in Oil—**
Eagle-Picher Lead Co.
National Lead Co.

**Lead Wool and Containers—**
Eagle-Picher Lead Co.

**Lifting Jacks—(See Jacks)—**

**Lighting Equipment—**

**Lighting Equipment—**
Pyle National Co.
Westinghouse Electric & Mfg. Co.

**Liquid Level Controls (See Controllers)—**

**Litharge—**
Eagle-Picher Lead Co.
National Lead Co.

**Loaders—Trucks—**
Barber-Greene Co.

**Long Distance Telephone—**
American Telephone & Telegraph Co.

**Lubricating Devices—**
McCord Radiator & Mfg. Co.

**Lubricating Oils (See Oils)—**

**Lubricators—**
Ajax Iron Works.
Lunkenheimer Co.

**Lubricators—Force Feed—**
Manzel Brothers Co.
McCord Radiator & Mfg. Co.

## M

**Machine Tools—**
Ryerson, Jos. T., & Sons, Inc.

**Manholes—Tank—**
Brooks Engineering Corp.

**Manifolds—**
Reid, Joseph, Gas Engine Co.

**Meters—Gas—**
Equitable Meter & Mfg. Co.
Foxboro Co., Inc.
Metric Metal Works.
Pittsburgh Meter Co.
Roots, P. H. & F. M., Co.
Westcott & Greis.

**Meters—Gasoline—**
Pittsburgh Meter Co.

**Meters—Oil—**
Pittsburgh Meter Co.

**Molded Goods—Rubber—**
Goodyear Tire & Rubber Co.

**Motors—Electric—**
Fairbanks-Morse & Co.
Westinghouse Electric & Mfg. Co.

**Motors—Gasoline (See Engines—Gasoline)—**

## N

**Naphtha—**
Pure Oil Co.

**Natural Gasoline (See Gasoline—Natural)—**

**Natural Gasoline Plant Equipment**
Campbell, J. A.
Cooper, C. & G. Co.
Griscom-Russell Co.
National Gas Products Co.
Roots, P. H. & F. M., Co.
Ross Heater & Mfg. Co., Inc.
Smith Separator Co.
Westcott & Greis.

**Nitrogen—**
Linde Air Products Co.

**Nozzles—Spray—**
Power Plant Equip Co.

## O

**Oil and Gas Pipe Line Construction—**
Hope Engineering & Supply Co.

**Oil Burners (See Burners—Oil)—**

**Oil Field Equipment—**
Baker Casing Shoe Co.
Bridgeport Machine Co.
Gaso Pump & Burner Mfg. Co.
International Derrick & Equipment Co.
Iron King Mfg. Co.
Kaw Steel Construction Co.
National Supply Co.
Oil Well Supply Co.
Parkersburg Machine Co.
Parkersburg Rig & Reel Co.
Reed Roller Bit Co.
Regan Forge & Engineering Co.
Reid, Joseph, Gas Engine Co.
Republic Supply Co.
Simplex Equipment Co.
Trumble Gas Trap Co.

**Oil—Fuel—**
Crown Central Petroleum Corp.
Empire Refineries, Inc.
Gulf Refining Co.
Magnolia Petroleum Co.
Pure Oil Co.
Sinclair Refining Co
Texas Company, The

**Oil—Gas—**
Crown Central Petroleum Corp.
Gulf Refining Co.
Pure Oil Co.
Sinclair Refining Co.
Texas Company, The

**Oil—Lubricating—**
Barnsdall Refining Co.
Berry's James B., Sons Co.
Crown Central Petroleum Corp.
Empire Refineries, Inc.
Gulf Refining Co.
Humble Oil & Refining Co.
Magnolia Petroleum Co.
Pennzoil Co.
Pure Oil Co.
Sinclair Refining Co
Skelly Oil Co.
Texas Company, The

**Oil—Tractor—**
Barnsdall Refining Co.
Gulf Refining Co.
Pennzoil Co.
Pure Oil Co.
Skelly Oil Co.

**Oiling Devices—**
Lunkenheimer Co.

**Oil Meters (See Meters)—**

**Oil Piping Equipment (See Fittings)—**

**Oil Reclaiming Process—**
Barnickel, Wm. S., & Co.
Houston Pump & Supply Co.

**Oil Refinery Equipment (See Refinery Equipment)—**

**Oil Securities (See Securities)—**

**Oil Suction and Discharge Hose—(See Hose)—**

**Oil Well Cementing—**
Halliburton Oil Well Cementing Co.

**Oil Well Screens (See Screens)—**

**Oil Well Tools—**
D & B Pump & Supply Co.
Hinderliter Tool Co.
Reed Roller Bit Co.
Titusville Forge Co.
U. S. Tool Co.

**Over Shots—**
Reed Roller Bit Co.
Regan Forge & Engineering Co.

**Oxygen—**
Linde Air Products Co.

## P

**Packer Release—**
Acme Fishing Tool Co.

**Packers—**
Goodyear Tire & Rubber Co.
Guiberson Corp.
Larkin & Co.
Layne & Bowler Co.
Meier, E. C., Lubricating Co.
Oil Well Supply Co.
Regan Forge & Engineering Co.
Spang & Co.
United States Rubber Co.

**Packing—**
Crane Packing Co.
Durabla Mfg. Co.
Garlock Packing Co.
Goodrich, B. F., Rubber Co.
Imperial Belting Co.
Johns-Manville, Inc.

**Packing—Metallic—**
Crane Packing Co.

**Paint Guns—**
Binks Spray Equipment Co.

**Painting Equipment—Mechanical**
Matthews, W. N., Corp.

**Paints—**
Aluminum Co. of America
American Asphalt Paint Co.
Arco Company, The
Cook Paint & Varnish Co.
Detroit Graphite Co.
Dixon, Joseph, Crucible Co.
Du Pont de Nemours, E. I. & Co., Inc.
Eagle-Picher Lead Co.
Eclipse Paint & Mfg. Co.
Hill Hubbell & Co.
National Lead Co.
Sherwin-Williams Co.
St. Louis Surfacer & Paint Co.

**Pipe—Cast Iron—**
Greenspon's Jos., Sons Iron & Steel Co.
International Supply Co.
U. S. Cast Iron Pipe & Fdy. Co.

**Pipe—Lead Chemical and Anti-Monial—**
Eagle-Picher Lead Co.

**Pipe—Steel—**
Central Tube Co.
Continental Supply Co.
Greenspon's Jos., Sons Iron & Steel Co.
Jarecki Mfg. Co.
Kellogg, M. W., Co.
Murray Tool & Supply Co.
National Supply Co.
National Tube Co.
Republic Iron & Steel Co.
Ryerson, Jos. T., & Sons, Inc.
South Chester Tube Co.
Spang Chalfant & Co., Inc.
Superior Tube Co.
Wheeling Steel Corp.

**Pipe—Wrought Iron—**
Byers, A. M., Co.
Frick-Reid Supply Co.
Greenspon's, Jos., Sons Iron & Steel Co.
Oil Well Supply Co.
Reading Iron Co.
South Chester Tube Co.
Superior Tube Co.

**Pipe and Nipple Threading Machines—**
Bignall & Keeler Machine Works.
Cox & Sons Co., The
Landis Machine Co.
Ryerson, Jos. T., & Sons., Inc.

**Pipe Clamps (See Clamps—Pipe)**

**Pipe Grips—**
Larkin & Co.

**Pipe Headers—**
National Tube Co.
Newton Process Mfg. Co.

**Pipe Line Coatings—**
Hill, Hubbell & Co.

**Pipe Line Construction Tools—**
National Transit Pump & Machine Co.

**Pipe Line Equipment—**
Gaso Pump & Burner Mfg. Co.

**Pipe Screwing Machines—**
Buckeye Traction Ditcher Co.

**Pipe Straightening Machines—**
W-K-M Co., Inc.

**Pipe Suspension Device—**
Stearns-Rogers Mfg. Co.

**Pipe Threaders—Power—**
Williams Tool Corp.

**Pipe Tools—**
Armstrong Brothers Tool Co.
Nye Tool & Machine Works.

**Piping—Fabricated—**
Midwest Piping & Supply Co.

**Piping—Hard Rubber—**
United States Rubber Co.

**Piping—Steel & Iron—**
Crane Co.
Greenspon's, Jos., Sons Iron & Steel Co.
Power Piping Co.

**Pistons—**
Guiberson Corp.
Heppenstall Forge & Knife Co.

**Pistons—Expansion—**
Wilson Oil Tools Corp.

**Pistons—Slush Pump—**
Guiberson Corp.

**Plugs—Bottom Water—**
Guiberson Corp.

**Power Units—Portable (See Engines)—**

**Pre-Heaters—**
National Gas Products Co.
Newton Process Mfg. Co.
Ross Heater & Mfg. Co., Inc.

**Preservatives—Asphalt—**
American Asphalt Paint Co.

**Pulleys—Wood, Iron and Steel—**
Continental Supply Co.
Dodge Mfg. Co.

**Pulling Machines—**
Iron King Mfg. Co.
National Supply Co.
Safety Pulling Machine Co.

**Pumpers—Long Stroke—**
Farley Machine Co.

**Pumping and Pulling Motors—Electric—**
Westinghouse Electric & Mfg. Co.

**Pumping Equipment—**
American Well Works.
Axelson Machine Co.
Bryson Jackson Pump Mfg. Co., Inc.
D & B Pump & Supply Co.
Farley Machine Co.
Goulds Pumps, Inc.
Jones, S. M., Co.
Myers, F. E., & Bros. Co.
Northrup Equipment Co.
Oil Well Supply Co.
Prescott Co.
Ratigan, J. P., Co.
Waukesha Motor Co.

**Pumping Gear Units—**
Nuttall, R. D., & Co.

**Pumping Jacks (See Jacks)—**

**Pumping Powers—**
Bessemer Gas Engine Co.
Buda Co.
Frick-Reid Supply Co.
Jones, S. M., Co.
Kansas City Hay Press Co.
Marion Mch., Fdy. & Supply Co.
National Supply Co.
Oil Well Supply Co.
Pattin Bros. Co.
Reid, Joseph, Gas Engine Co.
Spence Machine Co.
Titusville Iron Works Co.

**Pumps—Boiler Feed—**
Ajax Iron Works.
Byron Jackson Pump Mfg. Co., Inc.
Fairbanks-More & Co.
Gardner Governor Co.
Goulds Pumps, Inc.
Oil Well Supply Co.

**Pumps—Centrifugal—**
American Well Works.
Byron Jackson Pump Mfg. Co. Inc.
Dean Hill Pump Co.
Fairbanks-Morse & Co.
Goulds Pumps, Inc.
Worthington Pump & Machinery Corp.

**Pumps—Direct Driven—**
Bessemer Gas Engine Co.

**Pumps—Electric—**
Prescott Co.

**Pumps—Fuel Oil Service—**
Blackmer Pump Co.
Goulds Pumps, Inc.
Northern Fire Apparatus Co.

**Pumps—Fuel Oil Transfer—**
Blackmer Pump Co.
Byron Jackson Pump Mfg. Co., Inc.

**Pumps—Gasoline and Oil for Filling Stations—**
Gilbert & Barker Mfg. Co.

**Pumps—Gear Driven—**
Gaso Pump & Burner Mfg. Co.
Lucey Mfg. Corp.
Prescott Co.

XUM

**Pumps—Hot Oil—**
Blackmer Pump Co.
Byron Jackson Pump Mfg. Co., Inc.
Goulds Pumps, Inc.
**Pumps—Pipe Line—**
Byron Jackson Pump Mfg. Co., Inc.
Frick-Reid Supply Co.
Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Goulds Pumps, Inc.
National Transit Pump & Machine Co.
Prescott Co.
Worthington Pump & Machinery Corp.
**Pumps—Portable—**
Gaso Pump & Burner Mfg. Co.
Wheatley Bros.
**Pumps—Power—**
Dean Brothers Co.
Fairbanks-Morse & Co.
Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Goulds Pumps, Inc.
Myers, F. E., Bro. & Co.
National Transit Pump & Machine Co.
Novo Engine Co.
Prescott Co.
Waukesha Motor Co.
**Pumps—Refinery—**
Blackmer Pump Co.
Byron Jackson Pump Mfg. Co., Inc.
Dean Hill Pump Co.
Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Goulds Pumps, Inc.
National Transit Pump & Machine Co.
Northern Fire Apparatus Co.
**Pumps—Rotary—**
Blackmer Pump Co.
Goulds Pumps, Inc.
Northern Fire Apparatus Co.
Roots, P. H. & F. M., Co.
**Pumps—Sand—**
Bridgeport Machine Co.
Larkin & Co.
**Pumps—Slush—**
Gardner Governor Co.
**Pumps—Steam—**
Dean Brothers Co.
Fairbanks-Morse & Co.
Frick-Reid Supply Co.
Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Lucey Mfg. Corp.
National Transit Pump & Machine Co.
Oil Well Supply Co.
Prescott Co.
**Pumps—Suction—**
Gaso Pump & Burner Mfg. Co.
**Pumps—Vacuum—**
Bessemer Gas Engine Co.
Chicago Pneumatic Tool Co.
Clark Brothers Co.
Gaso Pump & Burner Mfg. Co.
Miller Improved Gas Engine Co.
Roots, P. H. & F. M., Co.
Ross Heater & Mfg. Co., Inc.
**Pumps—Water—**
American Well Works.
Byron Jackson Pump Mfg. Co., Inc.
Gaso Pump & Burner Mfg. Co.
Goulds Pumps, Inc.
Northern Fire Apparatus Co.
Prescott Co.
**Punch—Rotary Belt—**
Victor Balata & Textile Belting Co.
**Purifiers—Oil Absorption—**
Sharpless Specialty Co.
**Pyrometers—**
Brown Instrument Co.
Republic Flow Meters Co.

R

**Ratchet Pipe Cutters—**
Toledo Pipe Threading Machine Co.
**Ratchet Pipe Threaders—**
Nye Tool & Machine Works.
Toledo Pipe Threading Machine Co.
**Ratchet Reamers—**
Nye Tool & Machine Works.
**Ratchet Stocks and Dies—**
Nye Tool & Machine Works.
Toledo Pipe Threading Machine Co.
**Receiving Boxes—**
Reid, Joseph, Gas Engine Co.
**Recorders—Differential Pressure—**
Equitable Meter & Mfg. Co.
Metric Valve Works.
**Refinery Equipment—**
American Radiator Co.
Blaw-Knox Co.
Braun, C. F., & Co.
Carbondale Machine Co.
Chicago Bridge & Iron Works.
Cross Engineering Co.
Graver Corp.
Griscom-Russell Co.
Kellogg, M. W., Co.
McKee, Arthur G., & Co.
Newton Process Mfg. Co.
Petroleum Appliance Co.
Petroleum Iron Works Co.
Power Piping Co.
Power Specialty Co.
Reid, Joseph, Gas Engine Co.
Ross Heater & Mfg. Co., Inc.
Ross-Meehan Foundries.
Smith, A. O., Corp.
Smith Separator Co.
Southwestern Engineering Co., Inc.
Southwestern Engineering Corp.
United Iron Works, Inc.
Universal Oil Products Co.
Vogt, Henry, Machine, Co.
Walsh & Weidner Boiler Co.
Westcott & Greis.
Widdell Engineering Co.
**Refractories—Furnace, Stills and Baffles—**
Botfield Refractories Co.
National Gas Products Co.
**Refrigerating Machinery—**
Carbondale Machine Co.
United Iron Works, Inc.
Vogt, Henry, Machine Co.
**Regulators—**
Fisher Governor Co., Inc.
Gilfillan Machine Works.
Smith Separator Co.
**Regulators—Gas—**
Chaplin-Fulton Mfg. Co.
Davis, G. M., Regulator Co.
Equitable Meter & Mfg. Co.
Fisher Governor Co.
Metric Metal Works.
National Gas Products Co.
Smith Separator Co.
**Rental Service—**
Bridgeport Machine Co.
**Reversible Clutches—**
Bessemer Gas Engine Co.
**Rig Irons—**
International Supply Co.
Lucey Mfg. Corp.
National Supply Co.
Oil Well Supply Co.
Parkersburg Rig & Reel Co.
**Rigs—Drilling, All Steel—**
International Derrick & Equipment Co.
Moore, Lee C., & Co., Inc.
**Rigs—Portable Drilling—**
National Supply Co.
National Turnbuckle Derrick Co.
Star Drilling Machine Co.
**Rod Guides—**
Meier, E. C., Lubricating Co.
**Rods—Polish—**
Jones, S. M., Co.
**Rods—Pull—**
Axelson Machine Co.
Columbus Sucker Rod Co.
Jones, S. M., Co.
Sheffield Steel Corp.
**Rods—Sucker—**
Axelson Machine Co.
Columbus Sucker Rod Co.
D & B Pump & Supply Co.
Frick-Reid Supply Co.
Jones, S. M., Co.
National Supply Co.
Oil Well Supply Co.
Republic Supply Co.
Sheffield Steel Corp.
**Rods—Valve—**
Jones, S. M., Co.
**Roofing—Asbestos—**
Johns-Mansville, Inc.
**Rope Socket Metal—**
Eagle-Picher Lead Co.
**Rope—Manila—**
Ajax Rope Co., Inc.
Boviard Supply Co.
Republic Supply Co.
**Rope—Wire—**
Ajax Rope Co., Inc.
American Cable Co.
Boviard Supply Co.
Bridgeport Machine Co.
Broderick & Bascom Rope Co.
International Supply Co.
Jarecki Mfg. Co.
Leschen, A. & Sons, Rope Co.
Wickwire-Spencer Steel Corp.
Williamsport Wire Rope Co.
**Rotary Bit Steel—**
Andrews Steel Co.
Heppenstall Forge & Knife Co.
**Rotary Drilling Equipment—**
Emsco Derrick & Equipment Co.
Frick-Reid Supply Co.
International Derrick & Equipment Co.
Link-Belt Co.
Lucey Mfg. Corp.
National Supply Co.
Oil Well Supply Co.
Republic Supply Co.
Titusville Iron Works Co.
**Rotary Lines (See Rope—Wire)—**
**Rotary Post—**
Reed Roller Bit Co.
**Rotary Tool Joints—**
Bartlesville Supply Co.
Hughes Tool Co.
**Rust Preventatives—**
Dearborn Chemical Co.
Eagle-Picher Lead Co.

S

**Sand Lines—Manila—**
Ajax Rope Co., Inc.
Plymouth Cordage Co.
**Sand Lines—Wire—**
Ajax Rope Co., Inc.
Broderick & Bascom Rope Co.
Wickwire-Spencer Steel Corp.
**Screens—Oil Well—**
Layne & Bowler Co.
**Screens—Water Well—**
Layne & Bowler Co.
**Screws Temper—**
Burns Tool Co.
**Separators—Centrifugal—**
Miller, Max B., & Co.
Sharpless Specialty Co.
**Separators—Gas and Oil—**
Smith Separator Co.
**Separators—Steam—**
Volz Engineering Equipment Co.
**Sheet Lead—Chemical and Antinominal—**
Eagle-Picher Lead Co.
**Sheets—Corrugated, Black and Galvanized—**
American Sheet & Tin Plate Co.
Ryerson, Jos. T., & Son, Inc.
United Alloy Steel Corp.
**Sheets—Steel—**
American Sheet & Tin Plate Co.
Republic Iron & Steel Co.
Sheffield Steel Corp.
United Alloy Steel Corp.
**Shingles—Asbestos—**
Johns-Mansville, Inc.
**Sleeves—**
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.
**Sleeves—Split—**
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.
**Slush Pump Pistons (See Pistons)—**
**Slush Pumps (See Pumps)—**
**Smoke Stacks—**
Donovan Boiler Works.
**Snuffers—Fire—**
Simplex Equipment Co.
**Sockets—**
Acme Fishing Tool Co.
Bridgeport Machine Co.
Spang & Co.
**Sockets—Sucker Rod—**
Guiberson Corp.
**Sockets—Swivel—**
Arbon, Paul, & Co.
**Sockets—Wire Rope—**
Chicago Steel Foundry Co.
**Soda Ash—**
Mathieson Alkali Works, Inc.
**Soda—Caustic—**
Mathieson Alkali Works, Inc.
**Solders—Bar and Wire—**
Eagle-Picher Lead Co.
Hoyt Metal Co.
**Spark Plugs—**
Mosler Metal Products Corp.
**Spears—**
Acme Fishing Tool Co.
Brown Tool Co., Inc.
**Special Steel (See Steel Special)—**
**Split Sleeves (See Sleeves)—**
**Sprockets—Power Transmission—**
Ajax Iron Works.
Chain Belt Co.
**Stands—Vice—**
Nye Tool & Machine Works.
**Stationary Pipe Threading Die Heads (See Die Heads)—**
**Steel—All Kinds—**
Ryerson, Jos. T., & Son, Inc.
**Steel—Alloy—**
Central Steel Co.
Timken Roller Bearing Co.
United Alloy Steel Corp.
**Steel—Bit—**
Central Steel Co.
**Steel—Hot Rolled Strip—**
Central Steel Co.
**Steel—Special—**
Andrews Steel Co.
Central Steel Co.
United Alloy Steel Corp.
**Steel Band Wheels (See Band Wheels—Steel)—**
**Steel Bridges (See Bridges)—**
**Steel Bull Wheels (See Bull Wheels—Steel)—**
**Steel Castings (See Castings)—**
**Steel Couplings for Casting, Line Pipe, Drill Pipe and Tubing (See Couplings)—**
**Steel Crown Blocks (See Crown Blocks)—**
**Steel Derricks (See Derricks)—**
**Steel Fabricators—Structural—**
Austin Co.
Braden Co.
Graver Corp.
International Derrick & Equipment Co.
**Steel Fittings (See Fittings)—**
**Steel Pitmans—**
International Derrick & Equipment Co.
Moore, Lee C., & Co., Inc.
**Steel Plate Construction—**
Chicago Bridge & Iron Works.
Graver Corp.
Kaw Steel Construction Co.
Petroleum Iron Works Co.
Vogt, Henry, Machine Co.
**Steel Sheets (See Sheets, Steel)—**
**Steel Valves (See Valves, Steel)—**
**Steel Walking Beams (See Walking Beams—Steel)—**
**Steel Wheels and Tug Rims—**
International Derrick & Equipment Co.
**Stills—**
Blaw-Knox Co.
Chicago Bridge & Iron Works.
Graver Corp.
Kaw Steel Construction Co.
Kellogg, M. W., Co.
McKee, Arthur G., & Co.
Newton Process Mfg. Co.
Petroleum Iron Works Co.
Smith, A. O., Corp.
Vogt, Henry, Machine Co.
Widdell Engineering Co.
**Stocks and Dies—**
Borden Co.
Nye Tool & Machine Works.
Toledo Pipe Threading Machine Co.
**Structural Steel Fabricators (See Steel Fabricators)—**
**Stuffing Boxes—**
Axelson Machine Co.
Kansas City Hay Press Co.
**Sucker Rods (See Rods—Sucker)**
**Suction Pumps (See Pumps)—**
**Sulphuric Acid—**
Eagle-Picher Lead Co.
**Superheaters—Steam—**
Power Plant Equipment Co.
**Swabs—**
Arbon, Paul, & Co.
Burt Corporation.
Guiberson Corp.
Simplex Equipment Co.
**Swedge Nipples—**
Dresser, S. R., Mfg. Co.
Harrisburg Pipe & Pipe Bending Co.
**Swing Line Equipment—**
Brooks Engineering Corp.
**Swivels—**
Layne & Bowler Co.
Lucey Mfg. Corp.
Titusville Iron Works Co.

T

**Tank Equipment—**
Brooks Engineering Corp.
Oil Conservation Engineering Co.
**Tanks—Bolted—**
Butler Mfg. Co.
Columbian Steel Tank Co.
Maloney Tank Mfg. Co.
Parkersburg Rig & Reel Co.
**Tanks—Bulk Station—**
Butler Mfg. Co.
Graver Corp.
**Tanks—Cylindrical—**
Petroleum Iron Works Co.
**Tanks—Elevated Steel—**
Chicago Bridge & Iron Works.
**Tanks—Field Storage—**
American Car & Foundry Co.
Donovan Boiler Works.
Graver Corp.
Kaw Steel Construction Co.
Kewanee Boiler Co.
Maloney Tank Mfg. Co.
Petroleum Iron Works Co.
Pittsburgh-Des Moines Steel Co.
Riter-Conley Co.
United Iron Works, Inc.
**Tanks—Horizontal Storage—**
Graver Corp.
Kaw Steel Construction Co.
Maloney Tank Mfg. Co.
**Tanks—Run Down—**
Donovan Boiler Works.
Graver Corp.
Kaw Steel Construction Co.
Newton Process Mfg. Co.
**Tanks—Truck—**
Butler Mfg. Co.
Columbian Steel Tank Co.
White Co.
**Tanks—Underground—**
Butler Mfg. Co.
Gilbert & Barker Mfg. Co.
Graver Corp.
Kewanee Boiler Co.
Pittsburgh-Des Moines Steel Co.
**Tanks—Welded—**
Chicago Bridge & Iron Works.
**Taper Taps—**
Hughes Tool Co.
**Tapes—Measuring for Oil Gauging—**
Lufkin Rule Co.
States Engineering Co.
**Temper Screws (See Screws)—**
**Thermometers—Indicating and Recording—**
American Schaeffer & Budenberg Corp.
Bristol Co.
Taylor Instrument Co.
**Threading Machines—**
Bignall & Keeler Machine Wks.
Cox & Sons Co., The.
Landis Machine Co.
**Thread Protectors—**
Spang & Co.
**Tightener—Belt—**
Victor Balata & Textile Belting Co.
**Tires—Automobile—**
Continental Supply Co.
**Tires—Pneumatic & Solid—**
Kelly-Springfield Tire Co.
**Tires—Truck—**
Kelly-Springfield Tire Co.
**Tongs—**
Bridgeport Machine Co.
Wilson Oil Tools Corp.
**Tongs—Back Up—**
Williams, J. H., & Co.
**Tongs—Break Out—**
Reed Roller Bit Co.
Williams, J. H., & Co.
**Tongs—Casing—**
Dunn Mfg. Co.
Guiberson Corp.
**Tongs—Chain Pipe—**
Armstrong Bros. Tool Co.
Williams, J. H., & Co.
**Tongs—Pipe—**
National Transit Pump & Machine Co.
**Tongs—Rotary—**
Dunn Mfg. Co.
**Tongs—Tool Joint—**
Guiberson Corp.
Hughes Tool Co.
Reed Roller Bit Co.
**Tongs—Tubing—**
Dunn Mfg. Co.
**Tool Chests—Pipe—**
Nye Tool & Machine Works.
**Tool Joints—**
Bridgeport Machine Co.
Federal Supply Co.
Hughes Tool Co.
Lucey Mfg. Corp.
Oil Well Supply Co.
Regan Forge & Engineering Co.
**Torches—**
Oxweld Acetylene Co.
**Tractor Oil (See Oil—Tractor)—**
**Tractors—**
Cleveland Tractor Co.
International Harvester Co. of America.
**Trailers—**
Spencer Trailer Co.
**Transmission Belt—Rubber—**
Goodrich, B. F. Rubber Co.
United States Rubber Co.
**Transmission Lining—**
Stanley Belting Corp.
**Traveling Block—**
Lucey Mfg. Corp.
Regan Forge & Engineering Co.
Wright Mfg. Co.
**Trenchers—Vertical Boom—**
Barber-Greene Co.
**Trucks—Motor—**
Ford Motor Co.
General Motors Truck Co.
Graham Brothers.
International Harvester Co. of America.
White Co.
**Tubes—Boiler, Charcoal Iron—**
Byers, A. M., Co.
Reading Iron Co.
**Tubes—Boiler Steel—**
Continental Supply Co.
National Tube Co.
Ryerson, Jos. T., & Sons, Inc.
**Tubing—**
Babcock & Wilcox Tube Co.
Byers, A. M., Co.
Central Tube Co.
Continental Supply Co.
National Tube Co.
Reading Iron Co.
South Chester Tube Co.
Spang, Chelfant & Co., Inc.
Superior Tube Co.
Wheeling Steel Corp.
**Tubing Catchers—**
Continental Supply Co.
Dunn Mfg. Co.
Guiberson Corp.
**Tubing Protectors (See Rod Guides)—**
**Tubular Goods—**
Central Tube Co.
Continental Supply Co.
Oil Well Supply Co.
Republic Iron & Steel Co.
Spang, Chelfant & Co., Inc.
Wheeling Steel Corp.
**Tubular Goods—Wrought Iron—**
Byers, A. M., Co.
Reading Iron Co.
**Turbines for Lighting Equipment**
Lucey Mfg. Corp.
Westinghouse Electric & Mfg. Co.

U

**Underground Tanks (See Tanks)**
**Underreamer Body Steel—**
Andrews Steel Co.
Heppenstall Forge & Knife Co.
**Underreamers—**
Bridgeport Machine Co.
Brown Tool Co., Inc.
Guiberson Corp.
Wilson Oil Tools Corp.
**Unions—**
Central Forging Co.
Jefferson Union Co.

V

**Valuations—**
American Appraisal Co.
**Valves—Balata—**
Victor Balata & Textile Belting Co.
**Valves—Blow-Off—**
Homestead Valve Mfg. Co.
Merco Nordstrum Valve Co.
**Valves—Brass and Bronze—**
Homestead Valve Mfg. Co.
Lunkenheimer Co.
Reading Steel Casting Co.
Walworth Co.
**Valves—Cast Steel—**
Chapman Valve Mfg. Co.
Homestead Valve Mfg. Co.
**Valves—Check—**
Gaso Pump & Burner Mfg. Co.
Lunkenheimer Co.
**Valves—Drop Forged Steel—**
Edwards Valve & Mfg. Co.
Vogt, Henry, Machine Co.
**Valves—Gate—High and Low Pressure—**
Chapman Valve Mfg. Co.
Crane Co.
Darling Valve & Mfg. Co.
Kennedy Valve Mfg. Co.
Kerotest Mfg. Co.
Ludlow Valve Mfg. Co.
Lunkenheimer Co.
Murray Tool & Supply Co.
Powell, Wm., Co.
**Valves—Iron—**
Chapman Valve Mfg. Co.
Lunkenheimer Co.
Merco Nordstrum Valve Co.
Reading Steel Casting Co.
**Valves—Metal Pump—**
Durabla Mfg. Co.
**Valves—Pump—**
United States Rubber Co.
**Valves—Relief—Supersensitive—**
Davis, G. M., Regulator Co.
**Valves—Steel—**
Chapman Valve Mfg. Co.
Edward Valve Mfg. Co.
Kerotest Mfg. Co.
Lunkenheimer Co.
Metric Metal Works.
Powell, Wm., Co.
Reading Steel Casting Co.
**Valves—Tank Vent—**
Brooks Engineering Corp.
Oil Conservation Engineering Co.
**Valves—Working Barrel—**
Atlas Ball Co.
Axelson Machine Co.
D & B Pump & Supply Co.
Hough, Charles N., Mfg. Co.
Northrup Equipment Co.
Oil Well Supply Co.
**Varnishes—**
Arco Company, The.
Detroit Graphite Co.
Sherwin-Williams Co.
**Vises—Bench—**
Nye Tool & Machine Works.
**Vises—Pipe—**
Nye Tool & Machine Works.
**Vises—Post—**
Nye Tool & Machine Works.

W

**Wagons—Truss Wheel—**
Athey Truss Wheel Co.
**Walking Beams—Steel—**
Emsco Derrick & Equipment Co.
Moore, Lee C., & Co., Inc.
**Water Cooling Systems—**
Power Plant Equipment Co.
**Water Softeners and Filters—**
Butler Mfg. Co.
Graver Corp.
**Wax—**
Barnsdall Refining Co.
Gulf Refining Co.
Pure Oil Co.
**Weight Indicators—**
Hughes Tool Co.
**Welding Accessories—Electric—**
Wilson Welder & Metals Co.
**Welding and Cutting Apparatus—**
Oxweld Acetylene Co.
**Welding Machines—Electric—**
Wilson Welder & Metals Co.
**Welding Supplies—**
Oxweld Acetylene Co.
**Welding Wire—**
Frick-Reid Supply Co.
Oxweld Acetylene Co.
Wilson Welder & Metals Co.
**Well Shooting—**
Eastern Torpedo Co.
Zero Hour Torpedo Co.
**Wheels—Pipe Cutter—**
Nye Tool & Machine Works.
**Wheels—Steel Automotive—**
Budd Wheel Co.
**Winches—**
Braden Co.
Brooks Engineering Co.
Oil Conservation Engineering Co.
**Wire Lines (See Cables—Steel)—**
**Wood Patterns and Models—**
Gaso Pump & Burner Mfg. Co.
**Working Barrels—**
Axelson Machine Co.
D & B Pump & Supply Co.
Franklin Valveless Engine Co.
Frick-Reid Supply Co.
Hough, Charles N., Mfg. Co.
McGregor Working Barrel Co.
Norris, W. C.
Northrup Equipment Co.
Oil Well Supply Co.
**Wrenches—Closet Spuds—**
Nye Tool & Machine Works.
**Wrenches—Drop Forged—**
Williams, J. H., & Co.
**Wrenches—Pipe—**
Trimont Mfg. Co.
Walworth Mfg. Co.
**Wrenches—Ratchet—**
Dresser, S. R., Mfg. Co.
Nye Tool & Machine Works.

Z

**Zinc Oxide—**
Eagle-Picher Lead Co.

XUM

# Oklahoma-Kansas and Eastern Pipe Line Report

## OKLAHOMA-KANSAS

### Pipe Line Statement for April

#### Runs

| | Month | Daily Av. |
|---|---|---|
| *Prairie Pipe Line Co. | 3,840,000 | 128,000 |
| Gulf Pipe Line Co. | 1,041,263 | 34,709 |
| Texas Pipe Line Co. | 457,001 | 15,233 |
| Magnolia Petroleum Co. | 1,285,967 | 42,866 |
| Empire Pipe Line Co. | 723,420 | 24,114 |
| Cosden Pipe Line Co. | 874,805 | 29,160 |
| Sinclair Pipe Line Co. | 1,653,840 | 55,128 |
| *Other lines | 7,920,000 | 264,000 |
| Total April | 17,796,296 | 593,210 |
| Total March | 17,668,564 | 569,953 |
| Difference | 127,732 | 23,257 |

#### Shipments

| | | |
|---|---|---|
| †Prairie Pipe Line Co. | 4,332,972 | 144,432 |
| Gulf Pipe Line Co. | 1,986,188 | 36,206 |
| Texas Pipe Line Co. | 787,526 | 26,251 |
| Magnolia Petroleum Co. | 1,504,766 | 50,159 |
| Empire Pipe Line Co. | 736,064 | 24,535 |
| Cosden Pipe Line Co. | 881,084 | 29,369 |
| †Sinclair Pipe Line Co. | 2,569,697 | 85,656 |
| *Other lines | 8,820,000 | 294,000 |
| Total April | 20,718,297 | 690,608 |
| Total March | 20,540,959 | 662,617 |
| Difference | 177,338 | 27,991 |

#### Stocks

| | |
|---|---|
| *Prairie Oil & Gas Co. | 27,311,000 |
| *Prairie Pipe Line Co. | 2,000,000 |
| Gulf Pipe Line and Gypsy Oil | 6,341,159 |
| The Texas Company | 3,608,827 |
| Magnolia Petroleum Co. | 4,939,729 |
| Empire Pipe Line Co. | 2,802,158 |
| Cosden Pipe Line Co. | 1,941,248 |
| *Sinclair Crude Oil Purchasing Co. | 20,200,000 |
| Carter Oil Co. | 13,672,648 |
| *Other lines | 9,800,000 |
| Total April | 92,616,769 |
| Total March | 94,761,334 |
| Difference | 2,144,565 |

*Estimated. †Prairie shipments include Texas crude oil. Sinclair shipments include Texas and Wyoming crude oil.

Note: Stocks do not include 5,900,000 bbls. of crude oil held in storage on private tank farms and leases.

## EASTERN PIPE LINES

### Runs From Wells

In the following table will be found the regular receipts from wells by various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for March and April:

| | Mar., '26 | Apr., '26 |
|---|---|---|
| Nat. Transit | 152,572.78 | 175,931.37 |
| S. W. Pa. P. L. | 92,161.74 | 89,773.16 |
| Eureka P. L. | 373,065.58 | 372,871.02 |
| Buckeye P. L. (Macksburg) | 327,422.18 | 304,514.55 |
| Buckeye P. L. (Cleveland) | 11,923.54 | 12,060.87 |
| Buckeye P. L. (Lima, etc.) | 135,330.32 | 127,204.85 |
| Indiana P. L. | 10,428.03 | 9,095.76 |
| Cumberland P. L. | 284,867.52 | 273,842.36 |
| N. Y. Transit | 18,958.88 | 20,181.07 |
| Tidewater P. L. | 154,702.25 | 160,027.79 |
| Pure Oil Co. | 178,024.39 | 171,766.80 |
| Emery P. L. | 51,169.64 | 48,703.74 |
| Indiana Ref. | 86,931.73 | 93,143.14 |
| Paragon Dev. | 26,590.23 | 24,723.50 |
| Pittsburgh P. L. | 6,801.52 | 6,733.43 |
| Total | 1,910,950.33 | 1,890,573.41 |
| Daily average | 61,643.56 | 63,019.11 |

Note: Indian Refining Co. also reported other receipts of 301,677.79 bbls. Paragon Refining Co. had other receipts of 159,041.18 bbls. Paragon Development had other receipts of 2,227.34 bbls. Pure Oil had other receipts of 64,473.26 bbls.

### Petroleum Deliveries

The following tables exhibit the shipments or regular deliveries of various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for March and April:

| | Mar., '26 | Apr., '26 |
|---|---|---|
| Nat. Transit | 285,116.90 | 314,763.21 |
| S. W. Pa. Pipe | 389,473.31 | 409,564.75 |
| Eureka P. L. | 188,567.14 | 163,392.74 |
| Buckeye P. L. (Macksburg) | 130,098.28 | 94,254.91 |
| Buckeye P. L. (Cleveland) | 1,364.43 | 1,162.42 |
| Buckeye P. L. (Lima, etc.) | 744,048.97 | 823,641.06 |
| Indiana P. L. | 995,973.29 | 963,616.70 |
| Cumberland P. L. | 151,179.06 | 162,112.44 |
| N. Y. Transit | 579,234.50 | 668,407.25 |
| Northern P. L. | 130,218.72 | 133,960.98 |
| Tidewater P. L. | 174,944.54 | 93,030.34 |
| Pure Oil Co. | 217,525.82 | 205,777.75 |
| Emery P. L. | 48,128.83 | 45,829.05 |
| Paragon Ref. | 159,926.73 | 170,282.16 |
| Indian Ref. | 420,774.92 | 288,296.97 |
| Paragon Dev. | 33,731.97 | 26,494.22 |
| Pittsburgh P. L. | 7,088.04 | 6,539.32 |
| Total | 4,657,395.45 | 4,571,126.27 |
| Daily average | 150,238.56 | 152,370.87 |

### Gross Stocks

The gross stocks held by various pipe lines in the oil producing sections of New York, Pennsylvania, West Virginia, Ohio, Indiana and Kentucky, at the close of March and April, were as follows:

| | Mar., '26 | Apr., '26 |
|---|---|---|
| Nat. Transit | 1,040,222.33 | 1,069,233.29 |
| S. W. Pa. P. L. | 690,133.67 | 688,704.11 |
| Eureka P. L. | 1,497,216.56 | 1,621,601.25 |
| Buckeye P. L. (Macksburg) | 351,943.86 | 417,370.13 |
| Buckeye P. L. (Cleveland) | 52,018.53 | 73,536.91 |
| Buckeye P. L. (Lima, etc.) | 2,301,324.72 | 2,369,543.33 |
| Indiana P. L. | 558,421.46 | 544,568.51 |
| Cumberland P. L. | 593,665.61 | 599,474.86 |
| Southern P. L. | 488,804.68 | 481,210.52 |
| N. Y. Transit | 731,527.82 | 695,608.61 |
| Northern P. L. | 458,451.24 | 436,138.52 |
| Pure Oil Co. | 429,500.88 | 460,534.48 |
| Emery P. L. | 32,243.81 | 34,514.24 |
| Paragon Ref. | 85,108.55 | 72,985.28 |
| Indian Ref. | 123,338.21 | 231,194.41 |
| Paragon Dev. | 4,370.50 | 4,918.23 |
| Pittsburgh P. L. | | 4,614.59 |
| Total | 9,438,292.43 | 9,805,851.27 |
| Decrease | 141,102.45 | *367,558.84 |

*Increase.

### Grades of Oil

The following table shows the amount of the different grades of oil held by the eastern pipe lines at the close of March and April, showing the gross stocks of the above fields:

| | Mar., '26 | Apr., '26 |
|---|---|---|
| Penna. | 3,842,525.79 | 4,076,568.47 |
| Lima | 958,283.05 | 947,707.33 |
| Kentucky | 1,166,146.58 | 1,163,245.60 |
| Mid-Continent | 3,408,098.00 | 3,459,618.16 |
| Illinois | 63,239.01 | 158,711.71 |
| Total | 9,438,292.43 | 9,805,851.27 |

### Daily Average Runs

The following table shows the daily average runs of the Pennsylvania, Lima and Kentucky oil fields for the past four years:

| | 1923 | 1924 | 1925 | 1926 |
|---|---|---|---|---|
| January | 75,790 | 62,638 | 56,831 | 55,630 |
| February | 71,092 | 68,023 | 60,606 | 60,394 |
| March | 76,592 | 68,721 | 60,575 | 61,644 |
| April | 75,614 | 71,058 | 63,062 | 63,019 |
| May | 77,365 | 63,942 | 59,217 | ..... |
| June | 77,593 | 63,230 | 61,270 | ..... |
| July | 71,879 | 64,208 | 62,639 | ..... |
| August | 76,910 | 59,942 | 59,686 | ..... |
| September | 72,358 | 69,930 | 62,510 | ..... |
| October | 76,256 | 64,796 | 60,995 | ..... |
| November | 70,762 | 56,282 | 59,360 | ..... |
| December | 69,271 | 55,814 | 57,974 | ..... |

### Daily Average Shipments

The following table gives daily average shipments from the Pennsylvania, Lima and other fields for the past four years:

| | 1923 | 1924 | 1925 | 1926 |
|---|---|---|---|---|
| January | 171,067 | 145,518 | 157,889 | 156,056 |
| February | 164,219 | 148,732 | 160,863 | 159,488 |
| March | 185,487 | 147,098 | 154,591 | 150,239 |
| April | 170,751 | 147,611 | 151,429 | 152,371 |
| May | 177,102 | 134,997 | 146,996 | ..... |
| June | 173,598 | 143,010 | 149,467 | ..... |
| July | 168,330 | 124,187 | 161,338 | ..... |
| August | 142,776 | 123,120 | 161,730 | ..... |
| September | 137,266 | 127,325 | 156,719 | ..... |
| October | 134,597 | 123,170 | 145,388 | ..... |
| November | 131,426 | 124,400 | 143,582 | ..... |
| December | 139,909 | 151,392 | 150,162 | ..... |

### Gross Stocks

In the following table will be found the gross stocks of the various lines of the Pennsylvania, Lima and Kentucky oil fields, including oil received from other lines, at the close of each month for the past three years:

| | 1924 | 1925 | 1926 |
|---|---|---|---|
| January | 12,907,202 | 11,353,276 | 9,859,170 |
| February | 11,844,068 | 11,192,924 | 9,579,364 |
| March | 10,906,752 | 11,158,297 | 9,438,393 |
| April | 10,922,742 | 11,062,082 | 9,805,851 |
| May | 11,335,309 | 11,207,562 | ..... |
| June | 11,544,204 | 11,093,796 | ..... |
| July | 12,062,361 | 11,067,453 | ..... |
| August | 12,221,676 | 10,974,481 | ..... |
| September | 12,206,836 | 10,781,753 | ..... |
| October | 12,664,061 | 11,086,850 | ..... |
| November | 12,268,530 | 11,068,158 | ..... |
| December | 11,583,680 | 10,458,445 | ..... |

### Franklin Pipe Line Co.

The following table exhbits the condition of the Franklin Pipe Line at the close of business for the months named and not counted in the stocks and averages reported above:

| | Receipts | Shipmts. | Stocks |
|---|---|---|---|
| 1925— | | | |
| April | 3,040.41 | 1,780.11 | 13,159.04 |
| May | 2,814.99 | 5,719.90 | 10,254.13 |
| June | 3,052.75 | 1,221.83 | 12,085.05 |
| July | 2,639.34 | 3,174.10 | 11,550.29 |
| August | 3,216.97 | 1,577.99 | 13,189.27 |
| September | 2,929.99 | 5,352.05 | 10,767.21 |
| October | 2,869.75 | 1,499.34 | 12,137.62 |
| November | 2,759.66 | 2,571.32 | 12,283.46 |
| December | 2,661.87 | 3,441.67 | 11,503.69 |
| 1926— | | | |
| January | 2,990.16 | 1,478.35 | 13,015.41 |
| February | 2,580.23 | 2,776.19 | 12,819.45 |
| March | 2,754.62 | 1,732.77 | 12,841.30 |
| April | 3,137.40 | 4,519.68 | 12,459.02 |

### The Illinois Field

The following table gives the report of the Illinois Pipe Line Co. in Illinois:

| | |
|---|---|
| Gross stocks, May 1 | 3,740,384.77 |
| Runs from wells | 581,315.39 |
| Other receipts | 399,373.14 |
| Regular deliveries | 464,734.35 |
| Other deliveries | 523,336.85 |

The amount of Illinois oil run by the Tidewater Pipe Co. in April was 29,641.65 bbls. and deliveries were 22,869.65 bbls. Adding these figures to those of the Illinois Pipe Line Co. makes the runs and deliveries as follows:

| | | |
|---|---|---|
| 1925— | | |
| May | 692,671.94 | 568,573.63 |
| June | 700,090.46 | 589,535.24 |
| July | 724,481.26 | 564,713.19 |
| August | 673,652.38 | 650,649.97 |
| September | 706,434.87 | 510,697.61 |
| October | 706,532.00 | 633,682.33 |
| November | 664,556.30 | 488,449.19 |
| December | 665,086.99 | 578,938.47 |
| 1926— | | |
| January | 665,243.62 | 516,083.76 |
| February | 632,611.99 | 506,310.51 |
| March | 753,300.74 | 524,625.95 |
| April | 610,957.04 | 487,604.00 |

The Tidewater Pipe Co., Ltd., also delivered in April, 75,798.73 bbls. of Oklahoma oil.

## AVERAGE DAILY RECEIPTS OF CALIFORNIA OIL AT ATLANTIC AND GULF PORTS

| | ATLANTIC PORTS | | | | | | GULF COAST PORTS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average bbls. per day— | Baltimore | Boston | New York | Philadelphia | Others | Total | Galveston | New Orleans Baton Rouge | Port Arthur Sabine Pass | Tampa | Total | Total All Ports |
| January | 9,355 | 13,484 | 32,581 | 19,387 | 5,097 | 79,804 | ..... | ..... | ..... | 65 | 65 | 79,869 |
| February | 13,111 | 9,464 | 28,214 | 34,393 | 20,107 | 95,289 | ..... | ..... | ..... | ..... | ..... | 95,289 |
| March | 7,000 | 2,516 | 48,839 | 16,612 | 16,903 | 91,870 | ..... | ..... | ..... | ..... | ..... | 91,870 |
| April | 19,033 | 5,133 | 28,333 | 13,400 | 22,867 | 88,767 | ..... | ..... | 4,700 | ..... | ..... | 93,467 |

## AVERAGE DAILY IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS

| | ATLANTIC PORTS | | | | | | GULF COAST PORTS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average bbls. per day— | Baltimore | Boston | New York | Philadelphia | Others | Total | Galveston | New Orleans Baton Rouge | Port Arthur Sabine Pass | Tampa | Total | Total All Ports |
| January | 12,451 | 19,484 | 49,451 | 12,645 | 21,903 | 115,934 | 21,903 | 25,871 | 5,645 | 4,871 | 58,290 | 174,224 |
| February | 14,642 | 16,071 | 60,107 | 9,464 | 20,750 | 121,035 | 22,321 | 50,250 | 6,286 | 6,714 | 85,571 | 206,606 |
| March | 28,387 | 15,935 | 81,742 | 16,290 | 34,258 | 176,612 | 19,355 | 44,097 | 7,096 | 5,294 | 75,842 | 252,454 |
| April | 15,200 | 14,000 | 76,833 | 10,633 | 39,333 | 156,000 | 19,200 | 24,900 | 2,000 | 4,433 | 50,533 | 206,533 |

## GROSS PRODUCTION OF THE UNITED STATES FOR 12 MONTHS

(IN BARRELS)

| | | California | Oklahoma | Texas | Kansas | Arkansas | Louisiana | Rocky Mountains | Eastern Fields | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| May: | Month | 18,820,328 | 14,443,675 | 13,077,697 | 3,493,266 | 11,813,996 | 1,886,752 | 2,799,542 | 3,167,300 | 69,502,556 |
| | Daily average | 607,107 | 465,925 | 421,861 | 112,686 | 381,097 | 60,863 | 90,308 | 102,171 | 2,242,018 |
| June: | Month | 19,288,135 | 13,832,970 | 12,602,540 | 3,229,440 | 9,200,372 | 1,830,965 | 2,754,498 | 3,389,000 | 66,127,920 |
| | Daily average | 642,938 | 461,099 | 420,085 | 107,648 | 306,672 | 61,032 | 91,816 | 109,000 | 2,204,264 |
| July: | Month | 20,411,049 | 14,263,565 | 12,337,598 | 3,686,675 | 7,836,819 | 1,898,178 | 3,129,199 | 3,348,000 | 66,910,083 |
| | Daily average | 658,421 | 460,115 | 397,984 | 118,925 | 252,768 | 61,231 | 100,942 | 108,000 | 2,158,390 |
| August: | Month | 21,005,580 | 14,441,040 | 11,936,079 | 3,558,087 | 7,450,580 | 1,858,543 | 3,250,448 | 3,177,000 | 66,677,357 |
| | Daily average | 677,599 | 465,480 | 385,032 | 114,777 | 240,341 | 56,727 | 104,853 | 102,484 | 2,150,883 |
| September: | Month | 20,062,763 | 14,825,040 | 11,264,890 | 3,393,270 | 6,457,950 | 1,776,570 | 3,235,625 | 3,212,000 | 64,228,108 |
| | Daily average | 668,759 | 494,168 | 375,496 | 113,109 | 215,265 | 56,219 | 107,854 | 107,067 | 2,140,937 |
| October: | Month | 20,015,076 | 14,921,199 | 11,196,511 | 3,477,146 | 6,409,281 | 1,871,830 | 3,394,990 | 3,248,000 | 64,534,033 |
| | Daily average | 645,648 | 481,329 | 361,178 | 112,166 | 206,751 | 60,382 | 109,500 | 104,774 | 2,081,745 |
| November: | Month | 19,095,907 | 14,590,980 | 10,650,087 | 3,221,760 | 5,927,955 | 1,758,882 | 3,088,121 | 2,992,000 | 61,325,692 |
| | Daily average | 636,530 | 486,366 | 355,003 | 107,397 | 197,599 | 58,629 | 102,937 | 99,753 | 2,044,190 |
| December: | Month | 19,249,711 | 14,123,848 | 10,930,455 | 3,308,816 | 6,047,883 | 1,763,966 | 3,187,164 | 3,086,900 | 61,698,743 |
| | Daily average | 620,959 | 455,608 | 352,595 | 106,736 | 195,093 | 56,902 | 102,812 | 99,552 | 1,990,282 |
| January: | Month | 19,069,563 | 13,674,813 | 10,880,814 | 3,250,536 | 5,489,620 | 1,606,952 | 3,136,280 | 3,014,000 | 60,122,578 |
| | Daily average | 615,147 | 441,123 | 350,994 | 104,856 | 177,084 | 51,835 | 104,396 | 97,226 | 1,939,438 |
| February: | Month | 17,163,963 | 12,387,620 | 9,689,120 | 2,877,812 | 4,756,836 | 1,583,904 | 2,769,605 | 2,931,000 | 54,159,860 |
| | Daily average | 612,999 | 442,415 | 346,040 | 102,779 | 169,887 | 56,568 | 98,914 | 104,678 | 1,934,281 |
| March: | Month | 18,825,786 | 14,312,886 | 10,974,341 | 3,334,887 | 5,115,837 | 1,889,946 | 3,151,250 | 3,327,000 | 60,931,933 |
| | Daily average | 607,283 | 461,706 | 354,011 | 107,577 | 165,027 | 60,966 | 101,653 | 107,323 | 1,965,544 |
| April: | Month | 18,091,771 | 14,468,190 | 10,778,760 | 3,330,120 | 5,127,510 | 1,959,570 | 3,231,404 | 3,272,000 | 60,259,325 |
| | Daily average | 603,069 | 482,273 | 359,292 | 111,004 | 170,917 | 65,319 | 104,239 | 109,066 | 2,008,644 |
| | Total 12 months | 231,100,232 | 170,285,816 | 136,318,892 | 40,161,816 | 81,633,639 | 21,686,058 | 37,128,126 | 38,164,280 | 756,478,188 |
| | Daily average | 633,151 | 466,536 | 373,476 | 110,032 | 223,654 | 59,414 | 101,721 | 104,569 | 2,072,543 |

XUM

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2,819.46
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Total
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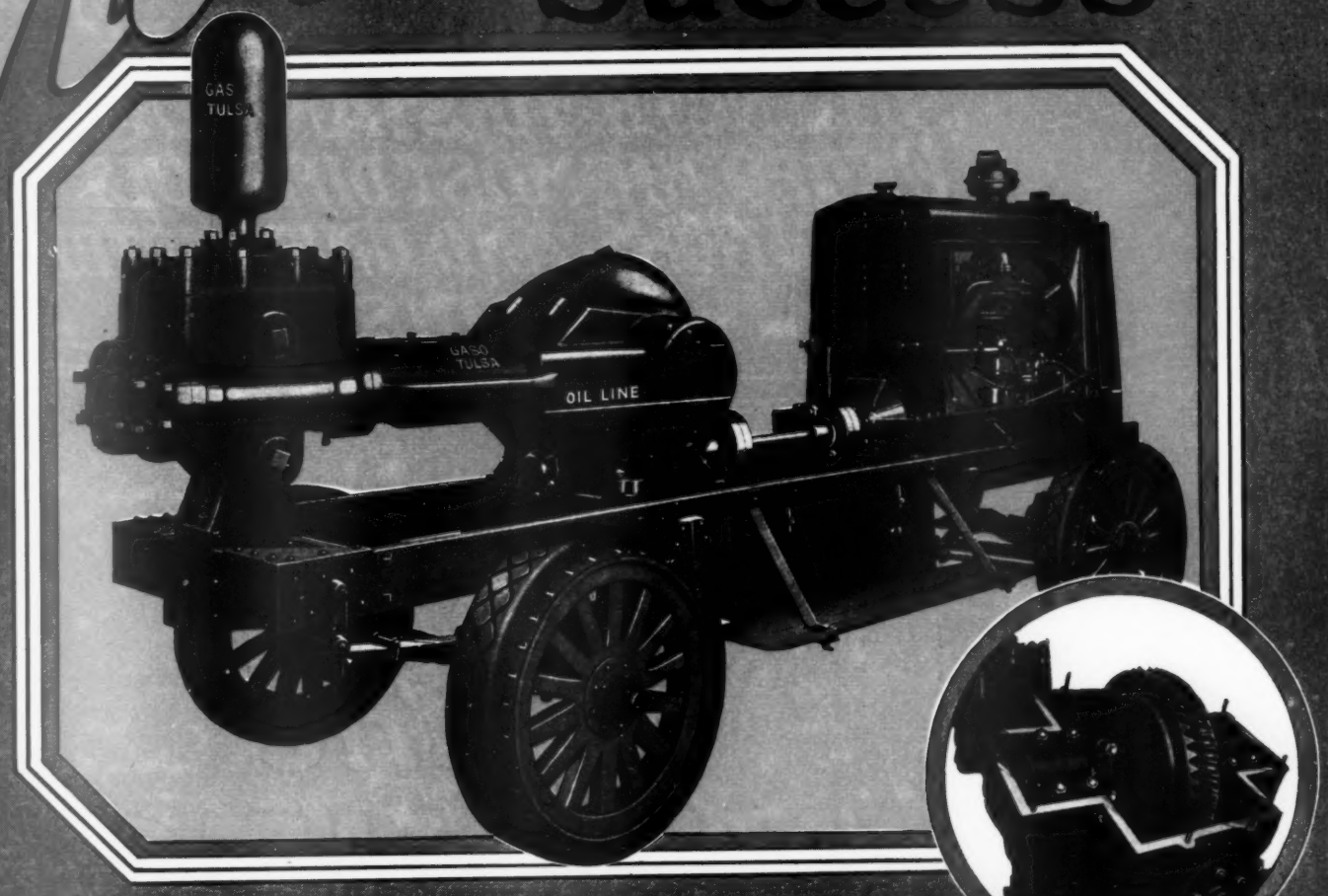
# New Butan Instant Success




## GASO Portable Pumping Plant
### With Worm-Driven Self-Lubricating Pump

*Just the thing for "Pick-Ups" in Pipe Line Breaks—Temporary or Semi-Permanent Pump Station and Booster Service—Water Supply in Drilling Operations, etc., etc.*

Three hours after this GASO Portable Pumping Plant made its first public appearance [at the 1925 Petroleum Exposition] it was necessary to mark it "Sold." Throughout the show it was a center of interest.

Since October, this latest addition to the GASO family has been severely and thoroughly tested in the field—and found to measure up fully to earlier expectations.

Sturdily built for rough use—self lubricating—worm driven—and equipped with a dependable power unit, it offers a type of pumping plant which the industry has long needed and which GASO is proud to present as its latest achievement. The plant is furnished mounted on either a trailer or on channel iron skids.

*Let us send you detailed information.*

GASO PUMP & BURNER MFG. COMPANY - *Tulsa, Okla.*

**SPECIFICATIONS**

PUMP—Duplex double acting, interchangeable cylinder liners from 2½" to 5", 10" stroke. Capacities, from 45 bbls. per hour at 500 lbs. pressure, to 250 bbls. per hour at 275 lbs. pressure. Has bronze ring gear and steel worm, with double thrust ball bearings, all enclosed in housing and running in oil.

POWER UNIT—40 H. P. Beda four-cylinder motor equipped with combination gasoline and natural gas carburetor. Pierce governor.

TRAILER—Standard tread, wooden wheels, 36x5 Cushion Tires. Extra large axles with Timken Roller Bearings. Front axle has regular automobile knuckle joint steering arrangement. Steel tool box. Four 48", 12-leaf Vanadium Steel Springs.

# GASO PUMPS
## for every oil industry need

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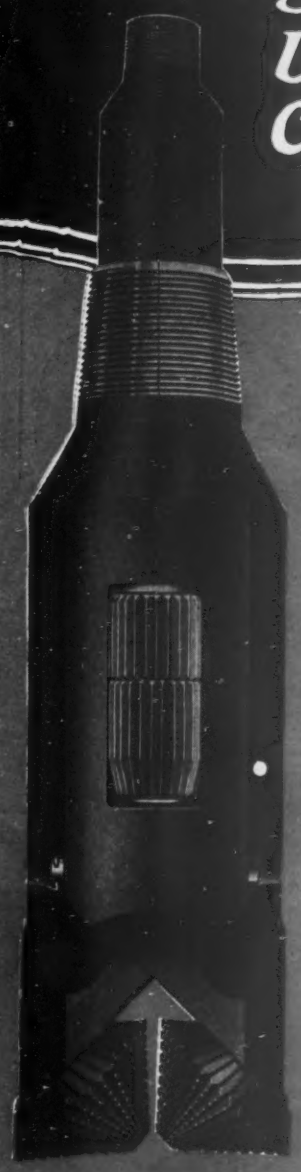
# Because

BOTH DESIGN AND MATERIAL INSURES THE NECESSARY STRENGTH TO STAND UP UNDER THE MOST DIFFICULT CONDITIONS AND UNEXPECTED STRAINS



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for all rock drilling

# HUGHES TOOL COMPANY

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OKLAHOMA CITY, OKLA.

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HOUSTON, TEXAS

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